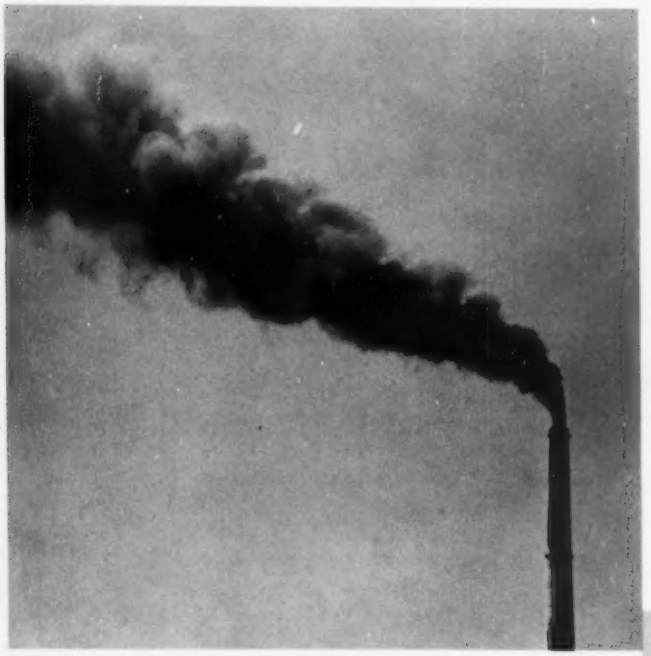
A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Incorporating *International Commerce*

AUGUST 21, 1972

# Commerce Today

## Coming Developments in Business and Technology



**Before**

**After**

# Newsmemo

Special attention is to be given to junked car disposal sites, automotive tire disposal and the economic and technological aspects of scrap metal research and development, the Industry Advisory Committee on Iron and Steel Scrap Problems has decided following a recent meeting at the Commerce Department. Other areas discussed by the committee and government spokesmen included a number of environmental concerns, solid waste legislation and regulation, export-import policy, a need for improved intragovernment coordination and government-industry cooperation in solving scrap metal problems; transportation costs, and the desirability of a centralized source of recycling information.

A 100-ton experimental ocean buoy will be anchored this month in the Gulf of Alaska about 385 nautical miles south of Anchorage to provide meteorological information throughout the winter. It is expected to aid weather forecasting for Alaska and the entire west coast of North America, according to Commerce's National Oceanic and Atmospheric Administration.

International air freight has the speed and flexibility to overcome time, distance and inventory problems in competing for overseas sales. That message has been brought by the U.S. airline industry to the Commerce Department for transmittal to U.S. producers who should be selling more in world markets. It is contained in an audio-visual slide presentation produced by the Air Freight Marketing Group of the Air Transport Association of America under the chairmanship of Thomas P. Gallagher, Jr., of American Airlines. International trade specialists in Commerce's 42 field offices will use the slides in their appearances before business groups. Other U.S. businesses--banks, vessel operators --are also teaming with Commerce in the current export expansion drive.

American glue is holding together the Olympic bicycle arena and rowing stands in Munich, Germany. A Commercial Officer at the American Consulate General in Stuttgart helped arrange a purchase of glue from a U.S. company, when the German contractor came by to explain that increases in local glue prices were forcing him into a bad loss on his building commitment. The Consulate officer supplied names of U.S. firms in this specialized field, cables were sent, and a Seattle company met price and delivery requirements. It was a $50,000 export sale. That same Consulate officer is one of hundreds of persons at U.S. overseas posts supplying the trade leads in this magazine's Worldwide Business Services section.

Two consecutive quarters--the last three months of 1971 and the first three of 1972--have reflected favorable upturns in shipments of selected electronic components. The first quarter of this year shows an increase to an estimated $1.2 billion, 10.6 percent above the $1.085 billion in the last quarter of 1971, and 12.5 percent more than the first quarter of 1971, reports Commerce's Bureau of Domestic Commerce.

# Commerce Today

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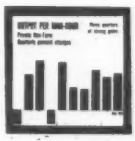
Vol. II, No. 23, August 21, 1972



**2 Economic Highlights**

Large increases in productivity over the past nine months have greatly improved prospects of returning to price-cost stability in the U.S. economy. In the second quarter, unit labor cost was stable for the first time in seven years.



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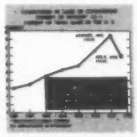

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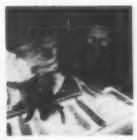

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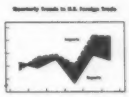
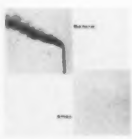



**COVER:** *It cost $1.7 million but the Allen S. King plant of Northern States Power Company at Bayport, Minn., nearly eliminated pollution from its smokestack by installing an electrostatic precipitator. When this plant is generating at maximum load, the precipitator removes 318 tons of fly ash per day as this before and after photo clearly demonstrates making it a brighter day for residents of that southeastern Minnesota community.* *See P. 4.*

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ECONOMIC
HIGHLIGHTS

# Productivity Up Sharply; Unit Labor Cost Remains Stable For First Time Since 1965

*Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).*

Recent large increases in output per manhour have greatly improved prospects of returning to price-cost stability in the U.S. economy. Over the past three quarters, productivity increases in the private non-farm economy have averaged about 5 percent at an annual rate—double the long-term average rate of 2½ percent from 1950 to 1970.

Because of the more rapid gains in productivity, unit labor cost—the cost of the amount of labor needed to produce a given amount of goods or services—has increased over the past three quarters at an average annual rate of only 1½ percent even though compensation per manhour climbed at a rate of 6½ percent.

For the second quarter alone, the results were even more dramatic. The combination of smaller increases in wages, due to the Administration's wage-price guidelines, and a large gain in productivity brought a slight decline in unit labor costs—the first since 1965. This stabilization of unit labor cost in the second quarter was accompanied by a significant reduction in the rate of inflation. The implicit price deflator for the private non-farm economy, a broad measure of prices, increased at an annual rate of only 1.8 percent in the second quarter, and the Consumer Price Index advanced only 2.2 percent.

In the late 1960s, the combination of small productivity increases and large wage increases brought substantial increases in unit labor cost. As a result, prices rose sharply. Productivity started advancing at a faster pace with the economic recovery of 1971; the 3½ percent increase that year was the largest in seven years.

Part of the gain in 1971 was due to cost-cutting efforts by business firms following slower sales growth in 1970, and part was due to the general expansion of the economy that enabled business to operate at a higher, and more efficient, level of production.

Thus, productivity gains usually are above-average during expansionary periods. In the long run, however, productivity depends primarily on machines and other productive facilities; the education, training, skill, and experience of the labor force; and technological progress through research and development.

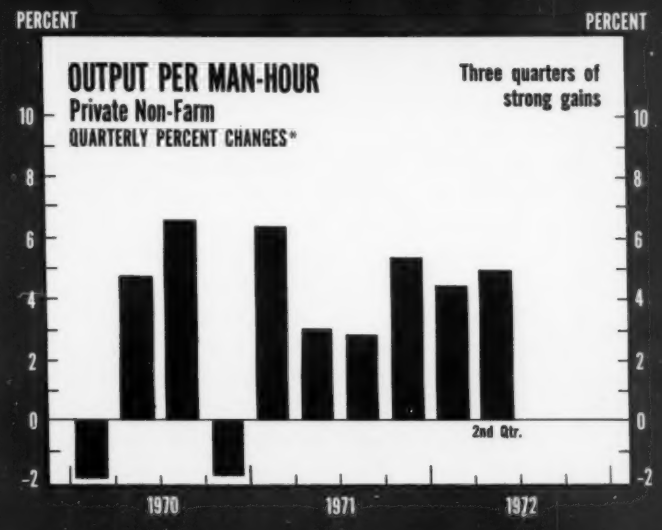
In the immediate future, continued above-average gains in productivity can be expected as the economy continues to expand at a rapid pace. Moreover, new plant and equipment will be coming on stream at a faster rate and this should reinforce the cyclical increases in productivity.

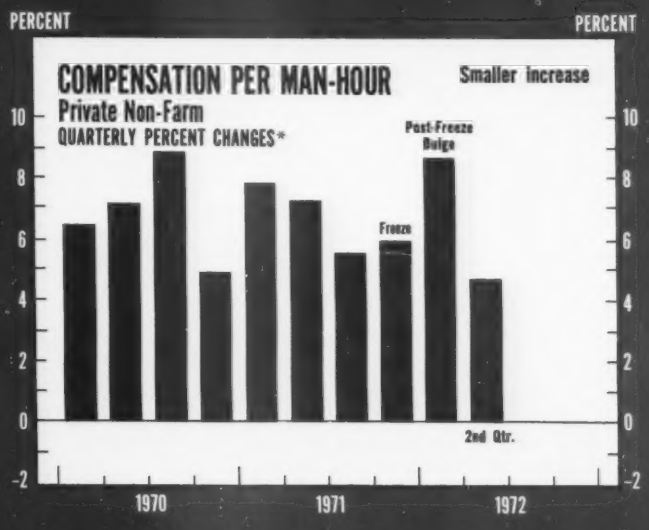
Obviously, stabilization of unit labor cost depends upon maintaining a balance between wage increases and productivity gains. The challenge over the longer term will be to maintain this balance even though productivity gains settle back to the historical average.

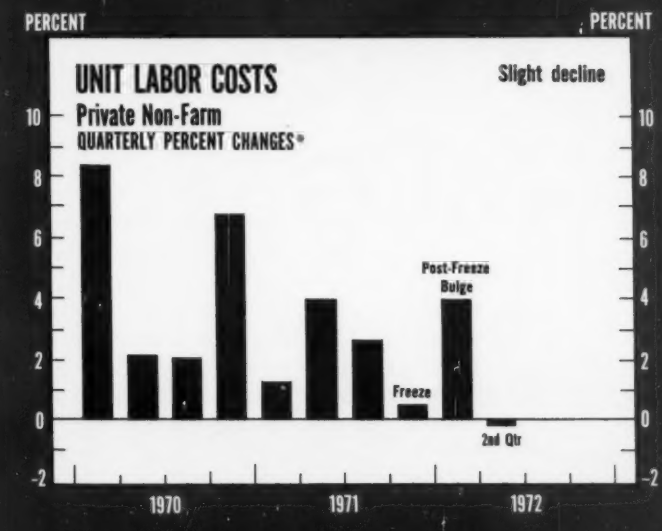
## Other economic data

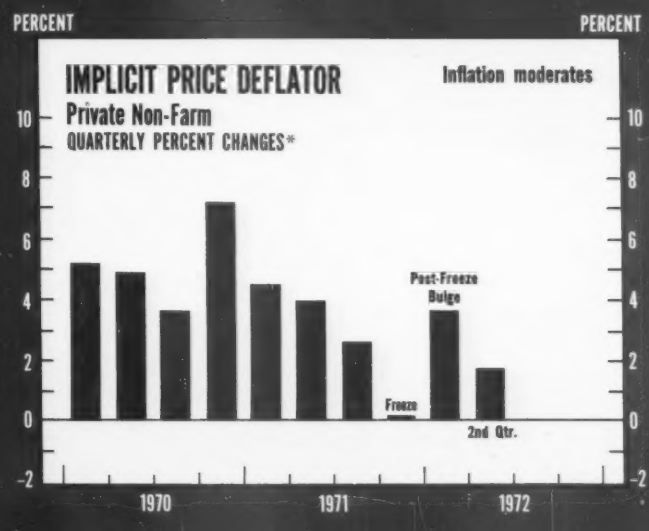
Unemployment remained at 5.5 percent in July after falling sharply in June. Retail sales scored a large gain in July, continuing the strong rise that began early in the year.

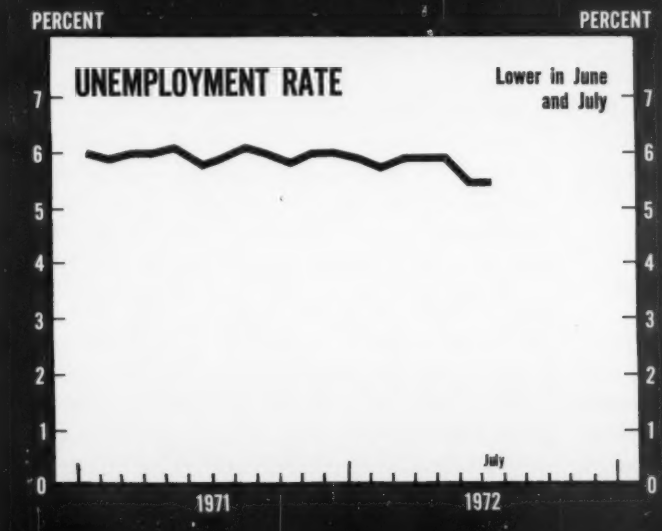
# Latest Indicators



* Annual rate
All data seasonally adjusted

Commerce Today
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August 21, 1972

# One Ecology Answer To Energy Need— More Natural Gas

## *Cleanest Fossil Fuel Could Eliminate Much Pollution, If There Were Enough*

The muddy-yellow, chemically-loaded smudge spewing out of the smoke stack of the Allen S. King power plant at Bayport, Minn., had to go. But to get rid of it, it cost the coal-burning plant's owner, the Northern States Power Company, $1,700,000.

It's true, the electrostatic precipitator installed to remove the harmful fly ash effluent discharged from the plant is 99 percent efficient, and when the plant is generating at maximum load, it removes 318 tons of fly ash per day. But not without cost.

### Ever-rising costs

Power plants nationwide are finding themselves caught with ever-rising costs to rid the environment of air and water pollutants that result from the energy they manufacture for both commercial and domestic needs. And these energy needs are rising at alarming rates. In fact, many anti-pollution actions call for more and more electric power to make them effective.

### Utilities hit hard

According to a recently released industry-wide survey on pollution control expenditures conducted by the McGraw-Hill Economics Department, just to bring *existing* facilities up to *current* standards, American business must spend a total of $22.8 billion by 1975. Hardest hit of all industries by this bill is the electric utilities industry, which must invest $6.2 billion over the next three years just to catch up with the standards in effect as of last January.

This year alone electric utilities have had to invest more than $1 billion on air and water pollution control, the largest expendi-

ture of any industry studied, and a jump of 82 percent over the $565 million spent by that industry last year.

The $220 million that must be spent by the gas utilities by 1975 to conform with today's pollution control standards is a small piece of the pie when compared with the electric utilities industry. Of that amount, $128 million has already been expended, leaving gas utilities less than $100 million to invest to comply with existing standards.

Why, then, if natural gas is clean energy and can so easily and inexpensively solve pollution problems, isn't it the answer for electric utilities and other industries?

A National Industrial Pollution Control Council report, released by its Utilities Sub-Council, points out that the answer is a serious natural gas shortage—even though estimates of potential supplies in the United States range upward from 1100 trillion cubic feet.

## Imminent shortage

The report quotes a statement by William D. Ruckelshaus, Administrator of the Environmental Protection Agency, which underlines this imminent shortage:

Ruckelshaus said, "Unhappily, no perfect accommodation is possible between energy and the environment. Nuclear reactors give off radiation, coal produces sulfur dioxide and the strip mines it is extracted from degrade the landscape, transport of oil causes spillage into fragile marine biosystems, disposal of oil by service stations and factories is a threat to our rivers and *natural gas is in short supply.*"

The report itself, *The Natural Gas Industry and the Environment,* stresses that the "major limitation of natural gas as an energy source is its availability — not its environmental impact."

One third of the Nation's energy requirements today is provided by natural gas, including some 28 percent of the energy required to generate the country's electric power. Forty-three percent of all energy used by industry today is furnished by natural gas.

Yet, in Washington, D.C., the Washington Gas Light Company was forced for want of this gas, to adopt a policy of not connecting to its distribution system any new customers. And, according to Thornton F. Bradshaw, President of Atlantic-Richfield Company, in testimony before the Committee on Interior and Insular Affairs, United States Senate, this spring, "this is not a singular instance—it has happened over and over again across the Nation."

By 1985, a study by the Energy Economics

**GAS PIPES READY**—*Pipes being stored for underground lines to bring natural gas from the North Slope of Alaska to help energy crisis.*

NORTH SLOPE BRIGADE—*Trucks waiting through an Alaska winter to begin work on the pipeline that will bring natural gas from the North Slope and ease the energy crisis, maybe by 1978.*

Division of Chase Manhattan Bank, estimates potential natural gas demand in the United States to reach 107 billion cubic feet per day. But it graphs domestic supply in that year at only 60 billion cubic feet per day, and indicates that the Nation's self-sufficiency, "even with the production of far away Alaska included, is not likely to be much over 50 percent."

## Why a deficit?

But, if the potential for finding natural gas reserves within the country or on its outer continental shelf areas is there, why does the U.S. face such a deficit in natural gas supply?

Bradshaw noted that the ability of the domestic oil and gas industry to take up the slack left by shortfalls in supplies provided by other domestic energy sources is rapidly diminishing, principally because of inadequate economic incentives for exploration and development, environmentalist opposition to these explorations, and governmental policies that need updating.

Shermer L. Sibley, President of Pacific Gas & Electric Co. and chairman of the NIPCC Utilities Sub-Council states, "The gas industry is confident this tremendous domestic potential can be developed by aggressive industrial action augmented by government cooperation and assistance."

In its report, the Sub-Council makes recommendations for actions that would let this happen:

- Revise existing policies and law. Three actions are suggested to accomplish this—more frequent and regular land lease sales, including the off-shore areas, for an orderly and timely development of the resources; more realistic field price levels (higher) to restore badly needed incentives for exploration and drilling; and more stability in sales contracts of producers committing new supplies to interstate markets.

The American Gas Association concurs and emphasizes that the downward trend experienced in the exploration and drilling for natural gas must be reversed. AGA notes that between 1956 and 1970, wildcat drilling —a sensitive measure of exploration, dropped 40 percent. Over the last ten years, an estimated 200 drilling rigs left the United States for more lucrative fields in other parts of the world. At the same time, the demand for natural gas in the U.S. was increasing rapidly at a rate of 6-8 percent per year during the period 1965-1970.

## Proved reserves

The Association also points out that the 26 trillion cubic feet of proved reserves located in the North Slop section of Alaska is currently still inaccessible to the U.S. market because no facilities yet exist to bring it from Alaska to the rest of the country—and this pipeline will probably not be flowing much before 1978.

Alaska, however, holds a potential for the discovery of 327 trillion cubic feet of natural gas, and the lower 48 states a potential of 850 trillion cubic feet!

But the low prices set for natural gas sold in interstate commerce by the producing companies have discouraged the producers from investing in the search for new gas. Therefore, probably the most effective incentive to accelerate drilling is the elevation of wellhead prices to a level compatible with the true value of natural gas as a fuel. It is also felt that legislation to provide a stability in prices agreed to between producing companies and the transmission or distribution companies will assist—establishing a stable market and providing producers with an incentive to expand searches for new gas sup-

plies. (At present, these contract prices can be reduced—even retroactively.)

The industry is also looking for a lease payment procedure which would provide bonus payments based on production and leave investment dollars with producing companies to give them the necessary encouragement to utilize this money to increase reserves.

- Develop new gas supply sources. Every effort should be made to encourage the development of the North Slope of Alaska and other areas where there is estimated potential for natural gas.
- Accelerate new pipeline projects. The report indicates that gas supplies in Canada's Northwest Territories could provide one and one-half billion cubic feet a day.
- Continue research on nuclear stimulation of tight gas formations. The Bureau of Mines has estimated that increased recovery of more than 300 trillon cubic feet of gas could be realized in low-permeability areas where nuclear stimulation of gas flow is possible.

**CUTTING EMISSIONS**—*Natural gas is available in this car with the flick of a switch. Such use of natural gas can cut hydrocarbon emissions 82 percent, carbon monoxide 87 percent, and nitrogen oxides 53 percent, reports General Services Administration.*

**RESEARCH VEHICLE**—*Storage cylinder in the trunk supplies enough natural gas for 100 miles. Connecticut Natural Gas Corp. is working on a natural gas-powered car to improve the environment.*

Two nuclear devices have already been detonated underground in an effort to release gas trapped within tight rock formations. The nuclear fracturing in New Mexico and Colorado, undertaken by the Atomic Energy Commission and two gas producers, offers the possibility of substantially increased production of gas in the Rocky Mountain area.

The gas industry, however, cannot proceed alone with nuclear stimulation projects, and full development of this technique for improving gas production from tight formations will require at least 10 years.

● Continue research on novel and practical techniques to make natural gas available from both liquid and solid fossil fuels. Such research could make available additional new sources of natural gas at locations of greatest need.

## Synthetic natural gas

A number of plants to make synthetic natural gas from petroleum feedstocks, particularly naphtha, have been announced.

The Utilities Sub-Council feels that the "creation of a domestic coal gasification industry would make for greater utilization of one of the most abundant natural resources—coal as a source of gas.

Currently, A.G.A. and the Department of the Interior are conducting a joint program to evaluate the known coal gasification processes from the pilot plant stage. The program will take four years at an annual cost of $30 million.

Each pilot plant will be regularly inspected and a "technical audit will be made on a continuing basis to appraise the research. Coal gasification can offer the greatest long-term contribution to this critical natural gas shortage.

Uses for natural gas are increasing daily. It is a possible solution to the major pollution problem caused by automobiles in urban areas. The gas industry has supported research and development on steam engines, electric motors, gas turbines and natural gas fueled internal combustion engines. In fact, compressed natural gas has been used for a number of years in a limited number of vehicles powered with internal combustion engines. Further development and perfection of this type of engine utilizing natural gas could lead to elimination of pollution problems from the operation of vehicles. But not with a shortage of natural gas.

Research is also being done in the area of advanced incineration methods for municipal solid wastes. Natural gas used here may also be the answer—but again, not with a shortage of natural gas.

● Encourage importation of liquefied natural gas (LNG) and feedstocks for manufacture of substitute gas. Liquefied natural gas and gasification of light hydrocarbons are two sources of supplemental gas which can be employed immediately to help solve the energy crisis.

In the case of LNG, the gas is liquefied by cooling —260° Fahrenheit and, in its liquid state, takes up less than 1/600 of its original volume. Massive investments are now being made in facilities designed to make LNG available to United States markets. For 30 years limited LNG storage facilities have been in use in this country and some three dozen U.S. gas distributors have LNG storage capabilities.

"Although LNG will probably provide less than 5 percent of the country's annual requirements during the next 20 years, this is an important increment because of its on-the-spot peak load supply uses," says the report.

## Cleanest fossil fuel

President Nixon, in his energy message to Congress in June of 1971, pointed out the value of natural gas, saying, "As we carry on our search for cleaner fuels, we think immediately of the cleanest fossil fuel—natural gas."

Gas facilities seldom offend the eye. Pipelines are underground and compressor and regulator stations which control the flow of the natural gas through the 900 thousand mile network of pipes and mains in the U.S. are camouflaged. One station, for instance, was constructed in the form of a Dutch-styled farmhouse, another a contemporary brick home, while others use natural visual breaks to make them compatible with the landscape.

And the physical characteristics of natural gas are such that it simply does not pollute water, and it is virtually free of sulphur and particulates helping to alleviate air pollution.

With the potential for vast supplies of natural gas, there can only be one answer—develop the means and incentives to find it.

*—National Industrial Pollution Control Council*

# Shipping Industry Enters Space Age

## *Satellite-Aided Ship Operations Program For U.S. Fleet Will Increase Productivity*

A satellite-aided ship operations control system which will thrust the merchant shipping industry into the space age is expected to be in operation in the last part of this decade.

A ship control system using satellites linking ships and shoreside control centers is being developed aimed at increasing the throughput of U.S.-flag ocean carriers.

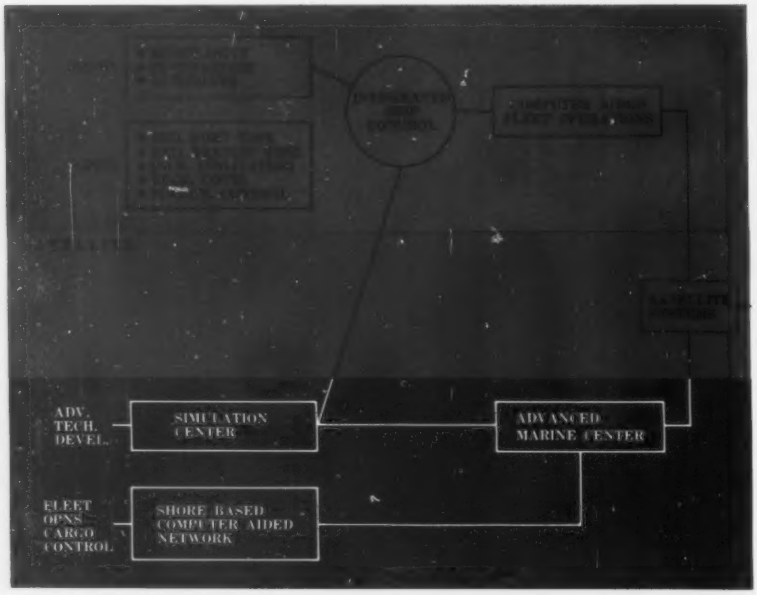
Full impact of this research and development program probably will be most effective in integrated ocean-born transportation systems and the control of pollution in the oceans and coastal water of the world.

Moreover, this advanced shipping operations system is expected to improve the overall U.S. flag productivity, when coupled with advanced ship design.

The research program is being developed through research contracts let by the Commerce Department's Maritime Administration.

General Electric Co. will develop and test the shipboard phase of the system. General Electric's Space Division at Daytona Beach, Fla., won a multi-year $7.8 million cost-

GLOBAL FLEET MANAGEMENT AND CONTROL




sharing contract to develop and test an integrated vessel control system using a shipboard computer, linked through orbiting satellites to a shorebased computer. The proposed system is intended to control selected ship's machinery and propulsion equipment, as well as navigation and administrative activities.

## General Electric study

Robert J. Blackwell, Assistant Secretary of Commerce for Maritime Affairs, said General Electric will conduct an analytical study of the costs and benefits of using such a system, the tradeoffs between various types of systems to perform specific functions, and will develop detailed specifications for the chosen method.

GE then will install a prototype system aboard the Gas Turbine Ship ADMIRAL WILLIAM M. CALLAGHAN, owned and operated by Sun Export Holding Corp. under long term charter to the Navy's Military Sealift command.

Systems assessment and development of specifications are expected to take 18 months, with installation and testing of the new equipment aboard the CALLAGHAN, requiring an additional 24 months.

"This project is an important addition to Maritime's on-going program to adapt aerospace technology to marine operations," Blackwell commented. "Building on U.S. advancements in the computer and space sciences, we are attempting to improve the efficiency and lower the cost of operating U.S. flag vessels."

The General Electric work complements a contract recently awarded Computer Sciences Corp. for development of the shoreside link of the system.

A computerized shipping operations information system, designed to allow vital cargo control information to be communicated between vessels and central computer facilities ashore, which the vessel's owners can reach via remote computer terminals is to be developed under this contract.

Such a system will permit operators to generate timely information on cargo movements, including:

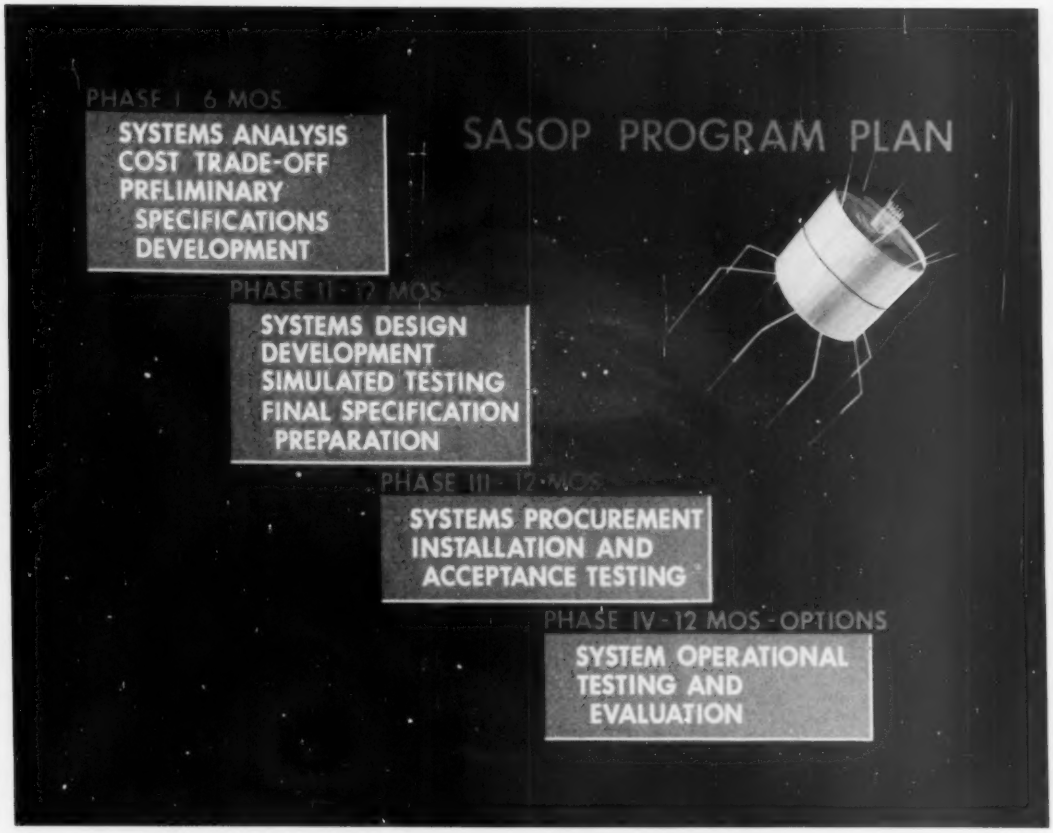
- Space availability data, cargo booking confirmations, and bill of lading processing, that operators can use to provide more efficient service to shippers.
- Scheduling data necessary to integrate domestic and foreign "feeder networks," including rail, road and water carriers, with ocean services.
- Information required to effectively allocate a shipowner's resources, including funds, manpower, ships, and equipment, on both a day-to-day and a long-range basis.
- Information that must be collected and transmitted to the Government in regular reports required by statutes or regulations, including financial data, fleet operating characteristics, and cargo carriage statistics.

## Satellite link

Additionally, Blackwell explained, the Maritime Administration has a program aimed at effectively using earth-stationary satellites for vessel communications and navigation. This program envisions using existing National Aeronautics and Space Administration Applications Technology Satellites for these purposes under a recently signed Maritime-NASA interagency agreement.

This program, being performed for Maritime by Applied Information Industries of Moorestown, N.J., was recently expanded to include development of a collision-avoidance system using satellites.

Specifically, the company is exploring ways in which radar information obtained aboard a ship may be economically transmitted via




satellite relay to a shore control station, where it can be integrated with data relating to other ships in the vicinity. Advisory instructions to avoid collisions can then be communicated back to the vessel.

## Goal Set In 70s

"By the late 1970s we hope to have a fleet of some 10 to 15 ships equipped with computers and three to four times as many with satellite communications and navigation systems at sea giving these research projects a full, integrated test," Blackwell asserted.

> ***The system's impact on the general public is seen to lie in a comparative reduction in the transport costs of goods moving in U.S. vessels as compared to foreign competition and the ultimate improvement in balance of payments resulting from greater U.S.-flag participation in ocean transport of goods.***

Blackwell said Maritime's interest in the application of satellite technology to marine operations grows out of experiments that were conducted in the late 1960s that demonstrated the effectiveness of satellite communications and navigation systems using Advanced Technology Satellites.

PROGRAM OBJECTIVES
■ IDENTIFICATION OF AN INTEGRATED AUTOMATED SHIP SYSTEM CONCEPT FOR FLEET OPERATIONS
■ DEVELOPMENT, TEST AND EVALUATION OF ADVANCED AUTOMATED EQUIPMENTS
■ ESTABLISHMENT OF AN AT-SEA CAPABILITY TO SUPPORT TEST AND DEVELOPMENT OF ADVANCED EQUIPMENTS
■ DETERMINE THE FEASIBILITY AND COST EFFECTIVENESS OF CONTROLLING SELECTED SHIPBOARD FUNCTIONS BY SHORE BASED
IDENTIFICATION OF NEW SUBSYSTEM AND COMPONENT GOALS FOR FUTURE R&D PROJECTS

# A Birth Certificate: The First Requisite For Doing Business

## *Simple Little Document Is Essential For Pension, Retirement Plans, Travel Abroad, Job Eligibility*

Just because a person is living and breathing is not legal proof that he was born at a certain time and place and of certain parents. To prove his birth and where it took place, he needs a simple little document —a birth certificate.

This proof of birth is needed for many business reasons — acquiring passports for business travel abroad, pension plans, early retirement plans . . . even to prove a boy or girl is old enough to be given a job.

But what if a birth certificate can't be located? And some 500,000 Americans each year find themselves in this predicament.

These one-half million Americans contact the Bureau of the Census for legally-acceptable proof of time and place of their birth.

They request a service which is rare, self-sustaining, and deals in only one commodity: evidence of existence.

This was once thought to be a Federal function that would phase itself out of business as more local and State governments developed comprehensive birth and other records. But it hasn't worked out that way.

So the Personal Census Service Branch of the Social and Economic Statistics Administration, U.S. Department of Commerce, continues to provide from its records in Pittsburg, Kansas, proof of birth to a half million persons each year in the form of "age searches."

### Evidence of counting

The service was set up to provide individuals, their legally designated representatives in certain cases, or their heirs with evidence that they were counted and were of a certain age at the time of prior censuses. Such proof is usually sought by those not able to obtain it from local or State records. Only since 1920, has birth registration been mandatory in all States. Since then, floods, fires, and human errors have taken a toll of even the best-intended record keeping methods.

Increasing company, union, government, and other pension plans, the advent of Medicare, a trend toward early retirement, additional travel opportunities requiring passports, and a variety of other business and social activities involving age have combined to continue the need for census age searches.

When no proof is forthcoming from local government records, baptismal certificates, family Bibles, or affidavits from parents, the next step is application to the Bureau's Personal Census Service Branch. There, for $5, a routine search will be made of the decennial census records of the years and locations

specified by the applicant. An expedited search costs $6 and likely will save several days.

The total of microfilmed census records in the Bureau's building in Pittsburg is enormous. Since the first census in 1790, nearly 1 billion names have been recorded. Not all are in Pittsburg because records of the censuses of 1880 and earlier, collected before we had a stringent confidentiality law, are on file and open to the public at the National Archives in Washington. But those vital to most people likely to be alive today are kept under lock and key in Kansas.

Checking census records to assist people needing evidence of birth arose after the Civil War when veterans, although voted pensions, often found that they needed proof to get paid.

## 'Age search'

The "age search" service settled down to a leisurely pace after the post-Civil War flurry, only to become hectic again after the Spanish-American War and World War I.

Passage of the Social Security legislation in the 1930's focused greater interest on the census age searches. With World War II, and the requirement for proof of age and citizenship for military service and defense jobs, demand skyrocketed. There were 737,000 applications in 1942 alone.

Demand fell once again after World War II, dropping to a low of 78,000 in 1948 and seldom totaling as many as 200,000 until late 1965 when Medicare became law. By 1967 applications for age searches had jumped to nearly 1 million.

Although the rate of applications has dropped to about 500,000 annually now, the people at Pittsburg expect the unexpected because the fluctuations of the past have emphasized that there is no way to anticipate the demand for evidence of age and birth.

Theoretically, all persons 52 years of age and younger have available to them State or locally-issued birth certificates. But, in practice, central records can and do suffer loss, destruction, or just plain deterioration of ink, paper or photocopy images.

Even official census records are not immune. The bulk of the 1890 census returns were destroyed in a later fire, although some were reconstructed from other sources.

The Bureau officials at Pittsburg had their own chilling scare. A tornado lifted the corner of the building's roof, and the experience raised the spector of millions of file cards scattered over the Midwest. A microfilming project was speeded up, and all records now are also on non-waftable film reels.

BIRTH DATE SEARCHERS—*Census clerks process thousands of miles of microfilm through these units daily in search of evidence of age place of birth.*

BUSINESS OF SEARCHING—*Branch Chief Francis N. Allai, standing, and an unidentified clerk view an original schedule film with a Soundex searcher used by the Census Bureau in research.*

Although the age-search process has been modernized and mechanized, it still takes a great deal of human effort to start the hunt.

An applicant must be as precise as possible in providing information about where he or she lived on the census dates soonest after

birth. The search covers two specified decennial censuses—a span of 20 years in which a lot can happen and memories become dim. Without detailed street or route addresses, exact names of the parent considered the "head-of-the-household," and specific information on how the applicant was known in those years, it may be difficult to find the right record film.

For instance, one Samuel Edison in 1860 failed to mention that the first name of his son, listed as Alva, was Thomas. But Mr. Edison did remember him as being 13 years of age and gainfully employed as a newsboy in Port Huron, Mich.

There are people also known to have held down or advanced their true ages in census and other documents to get jobs, enlist in the military—or simply to confuse a spouse. This has led to many pension or insurance woes for individuals and employee-employer problems. Often an appeal to the Personal Census Service Branch, Pittsburg, Kansas 66762, provides a simple solution.

No employer, however, can ask for an age search of an employee, although his knowledge of the service can assist individuals in making such age searches if necessary.

Besides the individual himself, there are relatively few others authorized to request such a search of Census files. These include parents or legal guardians of minor children, court-authorized guardians of a mentally-incompetent person, or executors, administrators, or proven heirs to the estate of a deceased person.

BIRTHDATES STORED—*Thousands of reels of microfilm, containing birth proof of Americans, are stored in these tornado-resistant files at the Census Bureau's special unit in Pittsburg, Kansas.*

## Confidential info

Not even a concerned friend, union or pension official, or a spouse or child can initiate the search, even with the best of intentions.

No one but the legal applicant and the discreet person conducting the search can know of any previous "fudging" or discrepancies. The Pittsburg searchers, like all Census Bureau employees, are required by law to keep all personal census information confidential, and stiff penalties are laid out for those who might violate confidentiality.

They are proud, however, that no conviction for such violation has been recorded since the Census Bureau was organized as a permanent Federal agency 70 years ago.

Every effort, too, is made to scout similar names or spellings (was it Schmidt or Smidt?) and to look for Juniors and Seniors; to verify middle initials, and to trace changes in street or road names. If a look at two census records won't do it, an additional fee is charged for scanning more recent or more ancient records.

Fees for the search are set by Congress to cover all expenses and are not returnable even if, by rare chance, the search can not produce results.

The job might sound dull, but the people involved in searching ages and evidence of birth look upon it as would a detective, a crossword puzzle fan, a chess player. It's not a game, but it does require an understanding that the requests are made by people who had trouble finding proof on their own or through other channels.

No information, incidentally, is available from an age search other than name, relationship to head-of-household, residence, and date of birth.

That even these details are still needed by about 500,000 Americans each year is ample proof that a service, once thought to be self-liquidating and all set for a retirement party of its own, is alive, well, and paying its own way.

Just because people still need to know, without a shadow of a doubt, if, when, and where they were born.

# DOMESTIC BUSINESS REPORT

- **Economy showing strong gains at mid-1972**
- **Containerization impact on the increase**
- **October stars 5-day food and dairy show**
- **Small businesses can be exporters**
- **Waste paper problem must be solved**
- **Black American status definitely up**

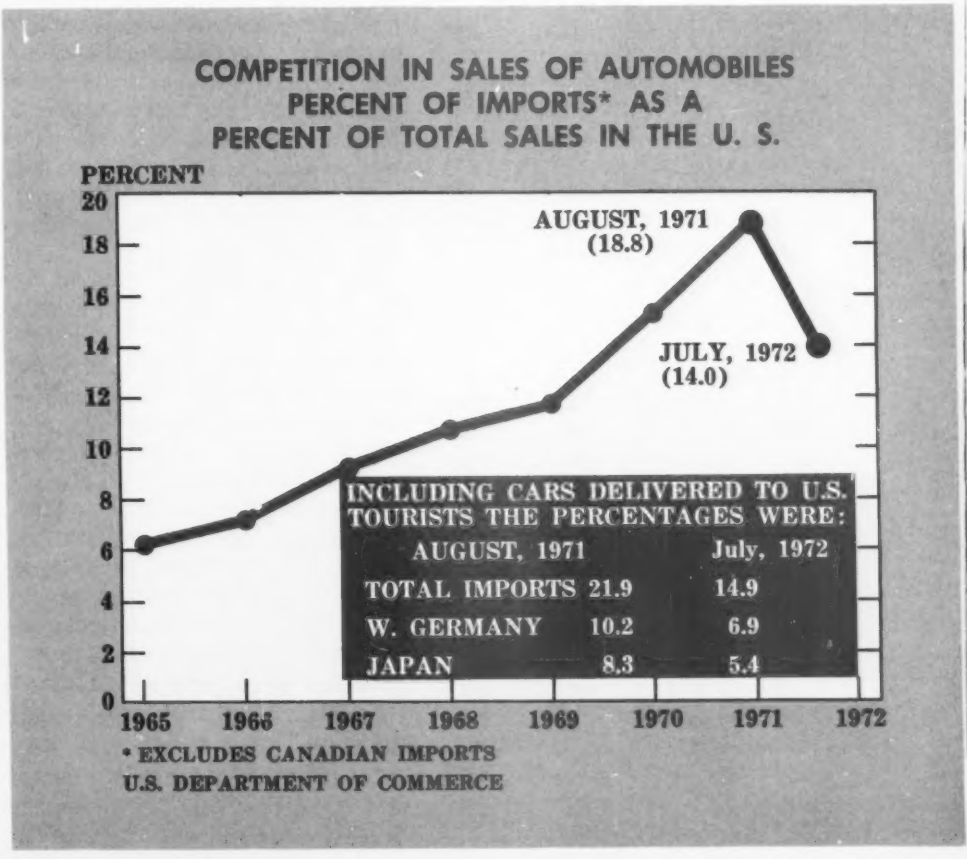
## 'Pocketbook Progress' Shows At Mid-Year

The New Economic Policy has been highly effective in accelerating economic growth, reducing the rate of inflation, and expanding employment and income.

This was the assessment of President Nixon and his key economic policymakers in a report to the press and the nation on 12 months of progress under the policies that were launched August 15, 1971. The President said that economic events of the past year add up to solid economic gains that "are a tribute to the public spirit of the people, as well as tangible pocketbook progress for the people."

He cited the following accomplishments under NEP:

- The rate of increase in the cost of living, which had been cut by one third before the freeze, has now been cut in half.
- There are 2.5 million more civilian jobs than there were one year ago.
- The unemployment rate has declined from about 6 percent to 5.5 percent.



- The economy is growing at a rate of almost 9 percent a year, the highest since 1965.
- Workers' real weekly spendable earnings have risen 4 percent in the last year, three times the average rate from 1960 to 1968.
- The United States has led the world on the path to international financial and trade reform which will substantially help to improve the U.S. international competitive position as well as help other countries strengthen their economies.

## Past year actions

Outlined at the day-long meeting were the actions of the past year, beginning with the 90-day wage-price freeze, the flotation of the dollar on world markets, and the imposition of a 10 percent surcharge on about half of total imports. Tax changes were proposed, including an investment credit to stimulate business. The freeze was followed by Phase II, with its wage and price controls.

While the President did note that "food prices still are of concern" and that "we must firmly establish a lower rate of inflation," "get the unemployment rate down further," and "continue to improve U.S. competitiveness to strengthen our international economic position," he was able to point out impressive gains that were made.

## Policy working

The fact that the New Economic Policy is working, the President stressed, is due to the cooperation of the American people. He pointed out that voluntary compliance by workers, businesses, landlords, consumers and tenants with the price-wage freeze and with Phase II has been remarkable. Leaders of business, labor, agriculture and state and local governments and many outstanding citizens have helped Federal officials involved.

Productivity (output per man-hour) has risen 4.3 percent in the past year, the biggest year-to-year gain since 1966, and this could not have happened without mutual contributions of labor and management. And the fraction of working time lost from strikes has been at an exceptionally low level.

"The American people," Mr. Nixon said, "can congratulate themselves on their performance in the past year and are increasingly enjoying the tangible benefits of what they and their Government have done together."

The President warned, however, that Federal expenditures in fiscal 1973 must not be allowed to go over the $250 billion ceiling which he has urged, or all the gains will be lost, resulting in big increases in the cost of living or big new taxes.

The report of the Council of Economic Advisers, *The Economy At Mid-1972*, states that it expects the vigorous economic expansions now being experienced to continue throughout the year. "Just how far we will have progressed by year-end is not assured," it says. "But about the general improving trend there is probably widespread agreement."

## Looking ahead

Which means, the report notes, it is time to look beyond 1972—to 1973 and the years that follow. "On the domestic scene the major general problem is to keep a steady expansion going, driving the unemployment rate down while achieving reasonable price stability with much less reliance on price and wage controls than we now have."

The Council warns that impending budget problems cannot be solved by higher taxes or by raising taxes generally. "It would be better to face the expenditure problem now than to count on successfully facing the tax problem later."

It also points out the strides made on the international side, through the Smithsonian agreement and the steps taken for expanded economic contacts between the United States and Communist countries as well.

## Press briefing

At the press briefing with the President were the Economic Council Chairman Herbert Stein and other members of the CEA, Secretary of Commerce Peterson, Treasury Secretary George P. Shultz, Secretary of Labor James Hodgson, Cost of Living Council Director Donald Rumsfeld, Office of Management and Budget Director Caspar W. Weinberger, and Treasury undersecretary for monetary affairs Paul A. Volcker.

## Good news

Secretary Peterson was able to report good news: The devaluation of the dollar, and other policies, has had a significant impact on the automobile industry.

The result has been a lessening of the price differential between U.S. automobiles and imports, causing the foreign share of the U.S. car market to drop from 18.8 percent last August to 14 percent this June.

Secretary Hodgson told reporters that workers are realizing a sharp improvement in real wage increase. "For the rank and file worker, the earning scenario written by the President's program has been upbeat, with continuing money increases."

Stein expressed concern about stepping "too hard on the gas too soon, or too long, and that, of course is the basis for our concern with the budget of fiscal 1973 and for fiscal 1974."

On the budget question, Weinberger reiterated his charge that "Congress is on a rather dangerous spending path." Weinburger added that the Administration has done its part in reducing Federal spending.

Phase II is continuing, with legislation that will enable it to exist through April of 1973.

CONTAINERSHIPPING INCREASES—*This containership is a sign of the times. Its numbers and the cargoes hauled in containers are expected to increase dramatically in the next decade, according to a Maritime Administration study.*

# *Inland Barges Subject Of Study To Reduce Pollution Nationwide*

The reduction of water pollution, a concern of both the Commerce Department's Maritime Administration and the U.S. Coast Guard, has prompted a joint study by the two agencies of alternative inland-barge designs to help solve this problem.

The study was announced by Robert J. Blackwell, Assistant Secretary of Commerce for Maritime Affairs, and Admiral Chester R. Bender, Coast Guard Commandant.

The study will develop in four stages, to survey possible design changes in barges such as the installation of double-walls and bottoms, their efficiency in preventing spills of petroleum and other hazardous cargoes, and the economic impact such installations might have on barge operations.

It includes the following specific tasks:

- Development of a profile of the existing U.S. tank barge fleet, as well as those on order and planned through 1974. The data for the profile on barge dimensions, design, and services will be obtained from Coast Guard records and questionnaires to operators.
- Examination of Coast Guard records on the 8,700 barge spills reported to it in 1971, as well as any later occurrences, to determine the effectiveness of alternative designs in minimizing cargo losses following casualties.
- A contract with a barge design agent to assess the construction and life-cycle costs of various barge designs, including the standard single-skin construction now used, double-wall construction, double-hull construction, single-skin construction with increased scantlings, and single-skin construction with strengthening of selected areas.
- Assessment of other economic factors that would bear on a choice between alternative designs. Such costs involve insurance, cargo capabilities, transportation costs as a part of consumer prices, and the impact of different tank barge designs on the competitiveness of barge transportation.

The Coast Guard will have primary responsibility for carrying out the second task, with Maritime being the lead agency for the other parts, Blackwell and Admiral Bender said.

## Containership Impact On U.S. Transportation Will Increase By 1985

By 1980 containerizable export and import trade crossing U.S. piers will have increased 53 percent over the 1968 level, a study for the Maritime Administration has forecast.

The study of containerization's impact on the U.S. transportation system said the 2.4 million container equivalents (20-foot) of containerizable trade crossing U.S. piers in 1968 will rise to 3 million in 1975 and 3.6 million in 1980.

Its recommendations to overcome problems raised by containerization included setting limits to the amount of concentration to be allowed in the marine industry, competing effectively with foreign consortia, and easing the impediments to the efficient inland movement of marine containers.

Prepared by Manalytics, Inc., a San Francisco research firm, the study indicates that the present 50 percent U.S. flag share of containerized trade will decline to 40 percent by 1975, but will maintain this level through the remainder of the decade.

The study was financed by the Maritime Administration, Sea-Land Service, Inc., and the Liner Council of the American Institute of Merchant Shipping. It discusses the present state of containerization in the United States, projects its future development, and recommends possible means of encouraging it. It includes detailed forecasts to 1980 of containerizable trade, container vessels, and port facilities.

"The Impact of Containerization On The United States Transportation System," is available in two volumes from the National Technical Information Service, 5285 Port Royal Rd., Springfield, Va., 22151, at a cost of $3 per volume. Order numbers are COM 72-10405 and COM-72-10406.

EXPO 71—*Exhibits in food and dairy processing, shown last year, are expected to increase in number at EXPO 72 which opens in Atlantic City, N. J. Oct. 1.*

# Five-Day Show On U.S. East Coast Will Update Food And Dairy Firms

More than 20,000 businessmen with an interest in the food and dairy industries are expected to spend five days in Atlantic City, N.J., this fall at one of the largest trade shows in the country, Food and Dairy Expo '72.

This year's exposition, designated for the first time as a V.I.P. (Visit, Investigate and Purchase) Show by the Commerce Department's Trade Fairs and Exposition Division, will open Oct. 1 in the boardwalk city's Convention Hall, sponsored by the Dairy and Food Industries Supply Association. Expo '72, the 28th biennial presentation by the suppliers to the food and dairy industries, is planned to be the biggest show of its type yet staged in the United States.

At the Food and Dairy Expo, food and dairy processors and businessmen involved in food-related organizations from all over the globe will have the opportunity to view the most modern and advanced processing equipment, machinery, and technology available to the industry.

More than 270 exhibits will feature a vast number of items of interest to food processors. More than 300 different products will be on display including supplies, systems and services for heating, cooling, freezing, casing, packaging, blending and flavoring.

At least 100 exhibits on food and dairy processing and handling equipment and components are set. In addition, a dozen displays will deal with cleaning and sanitizing systems and materials. Other presentations will highlight merchandising equipment and promotion, transport and delivery equipment, and ingredients.

Roy E. Cairns, president of DFISA, the sponsoring association for the Oct. 1-5 exhibition, notes that these shows play an important role in the development of the food and dairy industries.

"DFISA expositions," he said, "serve an important educational function of informing food and dairy processors of innovations in equipment, products, services and supplies."

## Setting the pace

The association head also pointed out that "since the early part of the century the expositions have set the pace in the food and dairy industry. We who work in this field benefit from the exchange of information and ideas that the show offers, but the ultimate gain is to the American public whom we serve."

Visitors to the exhibits will represent many executive and operating functions—management, plant operations, marketing, sales, research, purchasing, financial and engineering. They will come from the processing fields connected with food, dairy, beverage, canning, confectionery, brewery and related areas.

In addition, attendance of businessmen from outside of the U.S. will comprise a greater percentage than ever before, because of the selection of the show by the Commerce Department as a V.I.P. Show.

Created in 1967 by the Regional Export Expansion Council in cooperation with the Department of Commerce, the V.I.P. program encourages businessmen from around the world to visit, investigate and purchase at a limited number of carefully selected expositions of international significance. The Food and Dairy Expo '72 is the first in its field to be so honored.

Under the guidelines of the

Roy E. Cairns
*President of DFISA*

***A first for the Food and Dairy Expo '72, Oct. 1-5 in Atlantic City, N.J., is the computerized dual registration procedure to be employed.***

***The new system, designed to minimize chances for lost business and to maximize opportunities for new business, combines computerization with the simple techniques of a Sho-Plate that looks like a credit card.***

***The sophisticated system will keep accurate and complete records of who needs further information on what and allow speedy follow-up action to customer's requests, while at the same time eliminating the need for visitors to take elaborate notes or leave business cards behind.***

***Both visitors and exhibitors are expected to benefit from the dual system.***

"V.I.P." program, foreign visitors are urged to VISIT this foremost exhibition, INVESTIGATE the vast range of products and services displayed and PURCHASE in this great international marketplace.

DFISA is working closely with the Commerce Department in overseas promotion efforts. Official Airgrams with an Expo fact sheet and Association-prepared four-language brochure detailing exhibits and other data are part of the campaign.

Expo '72 will have interpreters on the premises proficient in major languages, to assist foreign visitors. Available to businessmen from overseas will also be trade and financial counseling from international trade specialists from the Commerce Department, Philadelphia Regional Export Expansion Council and the Philadelphia Business Service Field Office.

## Special features

Featured at the show will be an overseas registration desk, where international guests will receive special V.I.P. kits and badges, and at their service will be a V.I.P. lounge, with special facilities and a message center.

The Commerce Department's United States Travel Service personnel are assisting in tours or any other special arrangements deemed necessary, and major airlines and hotels are offering group discounts to overseas visitors.

At the exhibition, all the food and dairy processors in attendance will have the opportunity to meet and discuss with food and dairy suppliers special needs that often escape solution over the vast distance of land and sea.

Since the presentation is so large and so diverse, Cairns has offered the following tips to make the most of businessmen's trip to the Food and Dairy Expo:

- Prior to the Expo, plant operations and procedures should be studied with a critical eye to areas

**BEFORE AND AFTER**—*Atlantic City's seaside skyline has changed with the addition of a $13,000,000 wing on Convention Hall. Top picture shows the convention hall before the addition. Bottom picture shows the 526,000 square foot facility which will house the Food and Dairy Expo '72, Oct. 1-5 for a five-day show.*

STRING OF SUCCESSES—*Businessmen associated in the food and dairy industry are shown viewing exhibits at the 1971 exposition. The Food and Dairy Expo, which began in 1917, will feature international business for the first time this year.*

FOOD & DAIRY EXPO 72 ATLANTIC CITY OCT 1-5

of needed improvement. Businessmen should determine objectives in terms of what they will look for at Expo '72.

- Teams might be assigned to cover different exhibit categories at the show to derive the greatest company benefits from the show.
- Planned attendees should study the pre-Expo list of exhibitors, the wares to be shown and the floor plan of the displays. This will save valuable time after arriving at the exhibition.
- The Expo directory should be consulted for a description of each company's display and for the Classified Products Index.
- Food and dairy processors are urged to be alert to suggestions from exhibitors. If a company doesn't have the equipment needed, advice will be given.
- If possible, register in advance. To register now, businessmen can contact John Vogt, executive vice-president, Dairy and Food Industries Supply Association, 5530 Wisconsin Avenue, Washington, D.C., 20015, Telephone: 301, 652-4420.

## Double exposure

Cairns also reminds food and dairy processors that double exposure can be made by planning to attend this Oct. 1-5 event. It will give many businessmen interested in this field the chance to conduct association business at the same time. Several food and dairy association meetings are planned for the Atlantic City area during the Expo '72 period.

Dairy Society International, International Assn. of Ice Cream Mfrs., Milk Industry Foundation, National Ice Cream Mix Assn., and National Ice Cream Retailers Assn., and, for the first time, American Cultured Dairy Products Institute, will convene in Atlantic City Oct. 1-5. Food Engineering Forum, now co-sponsored by DFISA and American Society of Agricultural Engineers, has been scheduled as a part of Expo Week.

The technical, management-oriented Forum will present five key topics:

"Food Engineering, A Look Ahead," by Dr. Arthur W. Farrall, professor and chairman emeritus, Agricultural Engineering Department, Michigan State University; "World Hunger and the Need for Product Innovation," by Martin J. Forman, director, Office of Nutrition, Agency for International Development; "Metric Conversion and Its Implications for the Food Industry," by Gordon A. Goodrich, vice president, operations, General Foods Corp.; "Recycling of Food Plant Wastes," by Gerald E. Harris, senior project engineer, Campbell Soup Co.; and "Operating Concepts for Food Protection and Equipment Sanitation," by Keith H. Lewis, director, Office of Food Sanitation, Food and Drug Administration.

And the Collegiate Dairy Products Evaluation Contest, sponsored by DFISA, American Dairy Assn. and American Dairy Science Assn., has been an Expo Week event for 42 years.

Food & Dairy Expo had its beginning in 1917.

Growth since then has been extraordinary. Dairy and Food Industries Supply Assn. now consists of 400 member companies.

Expositions are managed by and for DFISA members; only qualified member companies may present commercial exhibits. Approximately 75 percent of DFISA members exhibit in the biennial expositions.

Cairns' message to the food and dairy industries is to "send your whole team of idea-searchers to Atlantic City Oct. 1-5. It might just be the best investment you'll make in the next two years."

# Small Businesses Can Be Exporters, Agency Declares

A New Orleans importer borrowed $200,000 from the Small Business Administration to develop an export market with actual and projected sales of $1 million a year.

Another $12,000 SBA loan has generated more than $200,000 a year in export business.

## Little capital needed

Examples of "what can be done with relatively small amounts of working capital" were cited recently by Thomas S. Kleppe, Administrator of the Small Business Administration.

"One reason this Nation's imports now exceed exports for the first time during this century is that the domestic-oriented small business sector has yet to fully discover and develop the vast profit potential of the world market," Kleppe said.

## Export misconcepts

A number of firms tend to shy away from exploring these lucrative outlets, Kleppe continued, because they mistakenly believe exporting is sacred territory open only to those with long experience in the field.

They also believe that exporting is too expensive and too complicated.

Yet, Kleppe pointed out, three out of five successful American exporters have fewer than 100 employees.

Noting that communications and transportation advancements now make it possible to service both foreign and domestic markets with almost equal speed and efficiency, Kleppe said there are other obstacles for the small businessman and SBA attempts to help him overcome them.

Testing and penetration of any market—foreign or domestic—requires working capital and in many cases the prospective exporter does not have sufficient funds to get into this market.

**Thomas S. Kleppe**
*SBA Administrator*

His normal banking sources should be pursued first, Kleppe said, since SBA, by law, may not compete with the Nation's private banks.

## Two methods

"However, if the bank prefers to invite SBA to participate in the deal, there are two ways it can be accomplished," he added. The bank and SBA could provide an immediate participation loan, with each lender advancing an agreed percentage of the total loan. Usually, the division is 25 percent by the bank and 75 percent by SBA.

Another way is SBA could guarantee a loan advanced by the bank, but that guarantee cannot be in excess of 90 percent of the total, the SBA Administrator explained further.

He said manufacturing firms that export are eligible for SBA loans if the number of their employees does not exceed from 250 to 1,500 persons, depending on the industry involved.

And, dealers or distributors that export are eligible if their annual sales do not exceed from $5 million to $15 million, depending on the industry involved.

—*Small Business Administration*

***New one-family homes using electricity as a heating fuel virtually doubled within the last five years, a new census report shows.***

***Twenty-six percent of new one-family homes sold in 1971 used electricity as the heating fuel, compared with 14 percent in 1967. During the same period, the use of gas declined from 78 percent to 69 percent. And fuel oil, from 7 to 5 percent.***

***For homes not built for sale—owner and contractor built—the trend to electricity between 1967 and 1971 was also very strong. In 1967, 29 percent of these homes used electricity as the heating fuel. By 1971 the proportion had increased to 38 percent.***

***"Characteristics of New One-Family Homes, 1971" (C25-71-13), containing additional statistics on physical and financial characteristics of new homes will become available this month from the Census Bureau, Washington, D. C., 20233. The cost is $2.***

## Nickel Set Aside Steady

Nickel set aside for the third quarter of 1972 will continue at 15 percent of the producers' average monthly shipments during the last six months of 1968, according to Hudson B. Drake, Deputy Assistant Secretary and Director of the Bureau of Domestic Commerce.

The set aside, which applied to defense rated orders for third calendar quarter delivery, was issued to The International Nickel Co., Inc., of New York, The Hanna Mining Co., of Cleveland, The Kaiser Aluminum and Chemical Corp., of Oakland, Calif. and N.C. Trading Co., Inc., of New York.

The order also requires each company to report to BDC its monthly shipments of nickel to fill defense rated orders no later than the fifteenth of each month of the quarter.

COOKING KETTLE—*Waste paper begins the recycling process in a hydro-pulper. One hundred and sixty degree water is added and the hydro-pulper, much like a cooking kettle, stirs up the waste paper so it is diluted. Eventually the paper stock enters the new paper machine where it is made into new paperboard.*

# Solving Waste Paper Disposal Riddle Urgent, Says U.S. Industry Report

Sixty million tons of waste paper annually will require disposal in some fashion by 1985, according to a report just released by the Container: Paper Sub-Council of the Commerce Department's National Industrial Pollution Control Council.

The report, *Paper and Wood Packaging in Solid Waste*, points out that 13 years from now 100 million tons of waste paper, including packaging, will be consumed each year by the American public. Only 40 million tons of this will be recycled, and the problem will remain of how to deal with what's left—which compares with the 36.5 million tons currently entering the Nation's solid waste stream.

Means have to be discovered, underlines the Sub-Council, to correct the disposal problems of paper and wood packaging, which today account for approximately half the sales volume of this $20 billion packaging industry.

To find the answers, the report calls for substantial progress along three broad, but inter-related, fronts:

- Expansion of markets for products currently made from waste paper.
- Development of new products which utilize recycled fibres, particularly the bulk grades.
- Improvement in the total economics of recycling, including the economics of collection and segregation of waste fibres.

Because of the vast costs involved in setting up and running waste paper processing operations, members of this Sub-Council are advocating tax relief for the operations and government subsidization of freight costs as inducements to U.S. exports of waste paper.

## High freight rates

Quoting the report, "The relatively high freight rates usually place waste paper from the United States at a price disadvantage as compared to an importing mill's local supply of waste paper and pulp."

According to the Sub-Council, U.S. waste paper delivered to another country usually costs two to three times as much as locally-obtained fibres. Recommendations for increasing U.S. exports of waste paper invariably list the reduction in freight costs as the most important problem to be solved in this area, since the demand for additional pulp in other countries is high.

Other suggestions included in this review of the problems include accelerated depreciation on new processing facilities installed for preparing waste paper for export.

It also points out that Federal, state or local contributions to the freight cost on exported waste

paper could be allocated in proportion to the "savings achieved by avoiding the cost of disposal in municipal solid waste systems, with no incremental expense to the taxpayer."

The NIPCC booklet also states that 90 percent of the cost of waste paper recycling is involved in the collection, sorting, and transportation processes which historically have been highly labor intensive.

## Need for recycling

The Sub-Council backs up the suggestions of a Midwest Research Institute study prepared for the Department of Health, Education and Welfare, which suggests that greater recycling might be encouraged through:

- Subsidies to improve salvage operations.
- Incentives to encourage reduction of the technical difficulties of processing waste papers.
- Educational programs, involving industry, consumer, and governmental groups.

It also suggests that sanitary refill be used for solid waste disposal, by covering piles of refuse with soil and transforming these mounds into parks. Perhaps a future direction of solid waste incineration could be pointed towards generating steam for electrical power. The industry executives note that a St. Louis electric company is experimenting in this area.

Ten recommendations are made by the Sub-Council to the United States paper and packaging industry for disposal of these waste materials. These include cooperation with formulators of inks, dyes and coatings to reduce de-inking problems and to assure removal of other contaminants in the recycling process; cooperation with producers of combination paperboard packaging and potential processors of recycled papers through the National Center for Resource Recovery, Inc.; Investigation of the potential for establishing manufacturer leasing arrangements for the use of pollution control equipment by small operations; Provision of technical assistance through the Solid Waste Council to operations with specific pollution problems.

## Other suggestions

Also, cooperation with the Environmental Protection Agency in the review of needed research into such matters as the assessment and treatment of water soluble inks as a constituent of effluents entering waterways and sound levels in and around paper converting plants.

Five other suggestions look for development of programs for expanding markets for products made from waste paper and new products which utilize recycled fibres; provision of incentives which will improve the total economics of paper recycling; increased exports of waste paper; expansion of usage of industry recycling symbol to create awareness of contributions to environmental quality; and reclamation and recycling of reusable fibres to the utmost practicable extent, along with the development of systems to recycle other fibres into energy.

Paper and Wood Packaging in Solid Waste makes the 27th NIPCC Sub-Council report on industry recommendations to achieve pollution clean-up, and can be purchased for 25¢ from The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

*—National Industrial Pollution Control Council*

**WASTE TO WEALTH**—*Boy Scouts in Santa Clara, Calif., gather old newspapers as part of a monthly drive conducted in cooperation with the Pioneer Paper Stock Division of Container Corporation of America. The newspapers are eventually processed into new paperboard by Container at one of its 12 recycling mills.*

# Small Businesses, Doctors, Landlords, Get Answers From Price Commission

Small business exemptions, pricing practices, health services and questions concerning rent are covered in a new series of questions and answers issued by the Economic Stabilization Program of the Internal Revenue Service.

The questions and answers, explaining decisions issued by the Price Commission are:

**Q: Is a physician and a clinic exempted by the small business exemption?**

**A:** No, institutional and non-institutional providers of health services are still considered nonexempt.

**Q. Where an individual controls two corporations and the two corporations have an average of 55 and 45 employees, respectively, are either of the corporations exempt?**

**A:** No. A firm is exempt from the Economic Stabilization Regulations, if it has an average of less than 60 employees. Since the two corporations are controlled by the same individual, they are considered to be a single firm. Consequently, the employees are combined and the corporations are not exempt.

**Q: If an employer who previously did not qualify for the Small Business Exemption fires some employees to bring his total employment level below 60, does the employer gain exempt status?**

**A:** The employer does not gain exempt status.

**Q: If an employer who previously qualified for the Small Business Exemption hires more employees to bring his total employment level above 60, does the employer lose his exempt status?**

**A:** The employer does not lose his exempt status.

**Q: Where an individual "rents" beach cottages on a weekly basis, may he qualify for the small business exemption?**

**A:** Yes. The small business exemption does not apply to landlords which rent real estate. However, service organizations such as hotels, motels, and beach cottages, etc., which "rent" to transients may qualify for the exemption if they meet the other requirements.

**Q: Where a corporation P, holds more than 50 percent interest in another corporation S, are the gross receipts of P and S combined in order to determine the proper price category of the firm?**

**A:** Yes. A firm includes an entity that is directly or indirectly controlled by the firm. Where one corporation holds more than 50 percent interest in another corporation, the former is considered to control the latter. Thus, the combined gross receipts are used to determine the price category of the group.

**Q: Where items on which the import surcharge was imposed are available for sale after Jan. 7, 1972, should the import surcharge be shown in dollars and cents on the sales ticket or invoice when the charges are passed on to the consumer?**

**A:** After the Jan. 7, 1972, date, the requirement to delineate the import surcharge on a sales ticket or invoice was no longer required by the Economic Stabilization Regulations.

**Q: Are charges for housing which is provided for its students by a non-profit university included within the exemptions granted in subpart D, part 101?**

**A:** Yes. Since these charges do not constitute unrelated business taxable income for the purpose of the imposition of tax on exempt organizations under Section 511 (a) (1) of the Internal Revenue Code of 1954, they are exempt from coverage of the Economic Stabilization Regulations under Section 101.34 (b).

**Q: May a physician's base price be a percentage of gross fees or billings by a hospital, rather than a specific dollar amount?**

**A:** Yes. If during the freeze base period a physician charged a hospital (in a substantial number of transactions) a percentage of the hospital's gross billings for a certain service (such as radiology) he may continue to charge that percentage, even though (1) he has incurred no cost increases, and (2) the hospital has increased its charge to patients for that service based on allowable cost increases.

***Activities of 80,000 governmental bodies are covered in a new two-part guide to the Census Bureau's statistical reports.***

***The first volume, describing nearly 100 recurrent reports and special studies of governmental activities, was released in June. The second volume is scheduled for 1974.***

***Recurrent reports, based on surveys of all state governments and a sample of local governments, provide statistics on governmental finances and employment. Special reports include spending for environmental control, national fire service statistical needs and figures on criminal justice.***

***Copies of "The Guide To Recurrent And Special Governmental Statistics," Series GSS 62, may be obtained for $1.50 each from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, or from Commerce field offices in major cities.***

# Black Americans Stride Upward In Education, Income

Black Americans are making impressive advances in education and young married blacks in the North and West are registering substantial gains in family income, a new census report shows.

Their high school dropout rate is declining (from 14.6 percent for 14 to 19 year olds in 1970, to 11.1 percent in 1971) and the percentage of young blacks attending college rose from 10 to 18 percentage while the proportion of whites went up only one percentage point, from 26 to 27 percent. Still, it's higher than that for the comparable group of whites, 7.4 percent in both 1970 and 1971.

Among young husband-wife families in the North and West the ratio of black to white income was about 104 percent in 1970, compared to 85 percent in 1959. In the North and West these young black wives earned about 30 percent more than their white counterparts and made a larger contribution to the family income than their white counterparts. One reason for this was that a larger percentage of the black wives worked year-round.

The 168-page Census report measures in depth the cumulative effect that sweeping changes in American society has had on the average black—where he lives, his education, his life style, his family, his job.

Other important findings of the study include:

- The black population is primarily metropolitan. During the past decade, the excess of births over deaths was the major factor in black metropolitan growth.
- Less than half the black population living outside the South was born in the South.
- Low-income black families were more likely than low-income white families to have received public assistance income, but less likely to have received social security benefits.
- In 1972, about 32 percent of black families were headed by a woman.
- In 1970, at the upper income level of $15,000 a year or more, about 94 percent of black families was headed by a man; the proportion for white families was about the same. At the lower end of the scale, the proportion of black families at the $3,000 a year level and headed by a man was 40 percent; for whites, 72 percent.
- The smallest percentage of overcrowding in black households occurred inside central cities of metropolitan areas.
- Between 1960 and 1970, the proportion of blacks living in homes they owned increased from 38 percent to 42 percent. In the South, the proportion was 47 percent in 1970.
- About 14 million blacks will be of voting age for the 1972 presidential election. In the District of Columbia, almost 70 percent of the voting age residents will be black, and blacks will represent from 22 to 30 percent of the total electorate in five Southern States — South Carolina, Georgia, Alabama, Mississippi, and Louisiana.
- Sharp gains have been registered in the number of blacks holding public office since civil rights and voting rights legislation was enacted in the 1960's. In 1972, of the 2,264 black elected officials, 206 were state legislators, more than double the 94 in these offices in 1964. The increase in state legislators has been greatest in the South.
- The majority of black undergraduate students in the South still attended predominantly black institutions in 1970.
- Washington, D. C., led the nation in the proportion of black workers in professional, technical and managerial occupations. The Nation's capital had 15 percent. Washington and Atlanta had the highest proportion of college educated blacks.

Copies of "The Social and Economic Status of Blacks in the United States, 1971," P-23, No. 42, are available at $1.25 each from the Superintendent of Documents, Government Printing Office, Washington, D. C., 20402, or from Commerce field offices in major cities.

*—Census Bureau*

## Distribution Of Families By Income In 1947, 1960, And 1970

(Adjusted for price changes, in 1970 dollars)

| Income | Negro And Other Races | | | White | | |
|---|---|---|---|---|---|---|
| | 1947 | 1960 | 1970 | 1947 | 1960 | 1970 |
| Number of families.... thousands..... | 3,117 | 4,333 | 5,413 | 34,120 | 41,123 | 46,535 |
| Percent ..... | 100 | 100 | 100 | 100 | 100 | 100 |
| Under $3,000 ..... | 54 | 36 | 20 | 20 | 13 | 8 |
| $3,000 to $4,999 ..... | 25 | 22 | 17 | 24 | 13 | 10 |
| $5,000 to $6,999 ..... | 11 | 16 | 16 | 24 | 17 | 11 |
| $7,000 to $9,999 ..... | 7 | 15 | 18 | 18 | 26 | 20 |
| $10,000 to $14,999 ..... | 4 | 8 | 17 | 15 | 21 | 28 |
| $15,000 and over ..... | | 3 | 11 | | 10 | 24 |
| Median income ..... | $2,807 | $4,236 | $6,516 | $5,478 | $7,664 | $10,236 |
| Net change, 1947-1970: | | | | | | |
| Amount ..... | (X) | (X) | $3,709 | (X) | (X) | $4,758 |
| Percent ..... | (X) | (X) | 132.1 | (X) | (X) | 86.9 |

X Not applicable.

Source: U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census.

# Federal Agency Is Partner To Train Indians, Blacks

Indians are being trained to manage recreation and tourism developments and minority bankers are conducting personnel development courses in separate partnership-type programs with Commerce's Economic Development Administration.

### Indian managers

A $243,939 grant to the American Indian Management Institute, Inc., of Albuquerque, New Mexico, will be used to train Indians to become managers of the growing number of tourist and recreation developments on the reservations and Indian-operated businesses.

The National Bankers Association, an organization of 38 minority operated banks, will use a $90,000 EDA grant to help conduct a job training program to strengthen member banks and encourage economic development in minority communities served by the banks.

NBA will provide $40,000 to complete the $130,000 total cost of the one-year program which includes:

### Training bankers

Recruiting and training members of minority groups for employment in the banking industry; helping employees of member banks advance to positions of greater responsibility; an information program for members of boards of directors and executive committees of member banks; helping bank employees and banks upgrade their economic status in the communities they serve.

Thirty-four Indian reservations now offer tourism and recreation facilities for public use and Indian tribes are engaged in nearly 250 other types of private enterprise, according to the American Indian Management Institute.

Indians fill only 10 to 15 percent of the managerial positions in these enterprises and the need for Indians in management positions is expected to grow as capital investments on Indian reservations increases.

### Non-profit classes

AIMA, a recently organized nonprofit corporation, will offer classes in Albuquerque in cooperation with the University of New Mexico School of Business Administration. It will also seek to:

Assist tribes in assessing needs for management training; conduct training programs to meet these needs; provide follow up technical assistance to trainees and enterprises in which they are employed; and perform a clearinghouse function to disseminate management information, and organize conferences and workshops concerned with enterprise management.

*—Economic Development Administration*

## Calendar For Businessmen

**Sept. 6 — Riverside, Calif.** — Government Procurement Conference for Businessmen. For information, Office of U.S. Rep. Victor V. Veysey, 1227 Longworth House Office Building, Washington, D.C. Phone: 202-225-2305.

**Sept. 12-13—Trenton, N.J.**—New York Regional Intergovernmental Planning Conference, coordinated by Department of Housing and Urban Development in cooperation with Commerce's Economic Development Administration. For information, Lois Alexander, HUD Regional Office, New York. Phone 212-264-8043.

**Sept. 15.—Chicago**—Minority Enterprise Government Procurement Conference. For information, Luis Encinas, Commerce's Office of Minority Business Enterprise, 14th and Constitution Avenue, Washington, D.C. 20230. Phone: 202-967-3936.

**Sept. 18—San Antonio**—Minority Enterprise Government Procurement Conference. For information, Luis Encianas, Commerce's Office of Minority Business Enterprise, 14th and Constitution Avenue, Washington, D.C. 20230. Phone: 202-967-3936.

**Sept. 23-28—Minneapolis**—American Public Works Association annual convention. For information, R. D. Bugher, executive director, APWA. Phone: 312-955-8026.

**Sept. 24-27—Cincinnati**—National Environmental Information Symposium, sponsored by the U.S. Environmental Protection Agency at its National Environmental Research Center. For information, Gilbert M. Gigliotti at the Center in Cincinnati. Phone: 513-871-1820.

**Oct. 7-11—Boston**—American Institute of Planners annual conference. For information, AIP in Washington, D.C. Phone: 202-783-0666.

**Oct. 22-26—Miami**—American Association of Port Authorities Convention. For information, contact the association in Washington, D.C. Phone: 202-638-6263.

### Ombudsman For Business

***Businessmen who need assistance in their dealings with the Federal Government now have a central office in Washington, D.C., to write or call for information, suggestions, or even for registering complaints —the Commerce Department Ombudsman for Business.***

***All inquiries should be addressed to the Ombudsman, Thomas E. Drumm, Jr., Special Assistant to the Secretary, U.S. Department of Commerce, Washington, D.C. 20230, or call 202-967-3178.***

# SCIENCE & TECHNOLOGY REPORT

- **Forecasts during Agnes' flooding to be reviewed**
- **Draft regulation would ban supersonics over land**
- **Nutrient-rich coastal upwelling probed**
- **New pollution monitoring devices mark big advance**
- **Fishing industry to benefit from new program**
- **Patents of special interest**

## *Satellites To Measure Earth's Resources*

Faced with increasing consumer demands, earth's dwindling resources are being measured for the first time on a global scale by means of two orbiting satellites. It is expected that programs for more efficient management of the limited resources may result from the basic data compiled on a scheduled basis.

The satellites are the Earth Resources Technology Satellite known by the acronym ERTS. The first was launched by the National Aeronautics and Space Administration from the Western Test Range in California last month and is now operative.

The ERTS program is a research and development tool to demonstrate that remote sensing, measurement, and data-banking from space is a feasible and practical approach to the development of efficient management of the earth's resources.

The National Environmental Satellite Service of Commerce's National Oceanic and Atmospheric

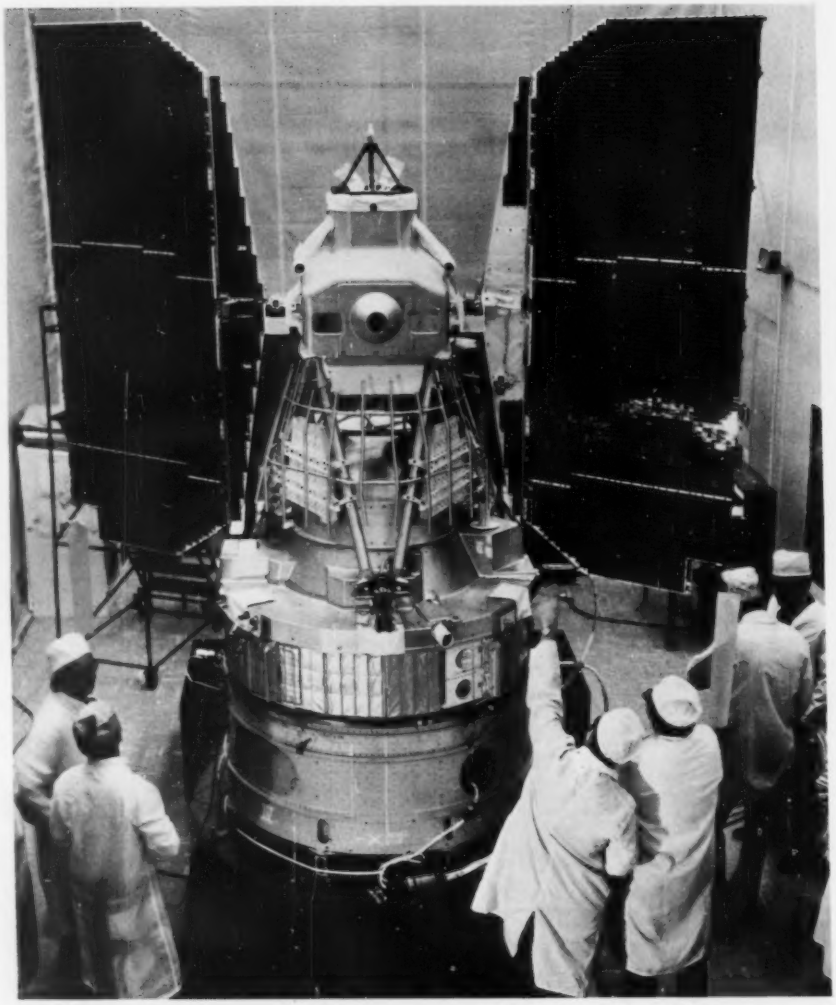
**PHOTO PROCESSING**—*A photo technician checks the performance of a versamat machine in the ERTS photographic processing facility at NASA's Goddard Space Flight Center. Such photos will eventually be available along with other data at 22 browse-files being established in various parts of the country.*

Administration is one of the three Federal agencies responsible for making the processed imagery from the ERTS available to users through a special ERTS Data Center in Washington, D.C.

Some 300 investigators—including scientists for the Departments of Agriculture, Commerce, Interior, the Environmental Protection Agency and the U.S. Army Corps of Engineers—will be evaluating the ERTS data for application in agriculture, forestry, geology, geography, hydrology, oceanography and meteorology.

ERTS data will be useful in detecting spatial variations in sea temperatures and turbidity, locating fish resources, monitoring pollution, and charting ice fields, shoals, and other hazards to maritime commerce. In the field of hydrology, ERTS will be able to detect water pollution, lake and reservoir levels, flood predictions, rain and snowfall levels, and undetected water reservoirs. The study of air pollution and severe storms should also be enhanced by satellite data.

Agriculture will benefit in terms of managing ranges, using land, identifying and combatting crop diseases, and improving irrigation. For geologists, ERTS will be able to monitor glaciers and volcanoes, improve earthquake prediction and warnings and identify terrain features usually associated with petroleum and mineral deposits. Urban development, transportation, and close estimates of interdecennial census may also benefit from the ERTS data contribution.



**BEFORE LAUNCH**—*The Earth Resources Technology Satellite (ERTS) spacecraft is shown in flight configuration with solar panels deployed following tests by the manufacturer, General Electric, in its Valley Forge, Pa., plant. This ERTS program is the first step in the merger of space and remote sensing technologies into a system devoted to developing more efficient management of the earth's resources.*

## Near-polar orbit

The comprehensive nature of the data bank to be provided by ERTS and the capability for quick retrieval constitutes a tremendous breakthrough, scientists explain.

The first satellite will be capable of making 100 by 100 nautical mile images of the earth. It is positioned in a circular, sun-synchronous, near-polar orbit at an altitude of 494 nautical miles, circling the earth every 103 minutes and completing 14 orbits a day.

Video data is to be received at ground stations in the U.S. and Canada and processed at the NASA Data Processing Facility at Goddard Space Flight Center in Greenbelt, Md.

The data will be produced as system-corrected images on 70mm. film and later converted to prints or transparencies in various sizes. Small amounts of the imagery may be produced in system-corrected color composites, either color or black and white scene-corrected

**TRACKING STATION** — *Video signals from the Earth Resources Technology Satellite cameras and scanner are received by an antenna like this one at NASA's Goddard Space Center.*

**PHOTO ANALYSIS**—*Scientists at Goddard Space Flight Center analyze early photo negatives beamed to earth from the Earth Resources Technology Satellite launched last month from California which is expected to provide vital environmental and resource data useful in the eventual management of the earth's resources.*

images or on computer-compatible tape. After each 18-day cycle, a 16mm. microfilm of one channel of both the Return Beam Vidicon and Multispectral Scanner and their accompanying printed catalogs, are sent to 22 "browse file" sites located throughout the country where the public may use them.

Certain of these browse-file sites will be provided with a terminal for access to a computerized data-research and retrieval system that complements the microfilm catalogs.

Detailed information for acquiring ERTS data will be available at each browse-file site about Sept. 1. Further information may be obtained by contacting the ERTS Data Center at: National Environmental Satellite Service, ERTS Data Center, FOB 4, Code S117, Washington, D.C., 20233.—*NOAA*

# *Forecasts During Agnes' Flooding To Be Reviewed*

Performance of the nation's flood forecasting and warning program during the eastern flood disaster precipitated by tropical storm Agnes is to be evaluated by the National Advisory Committee on Oceans and Atmosphere (NACOA).

Dr. Robert M. White, Administrator of Commerce's National Oceanic and Atmospheric Administration, has asked Dr. William A. Nierenberg, chairman of the committee and Director of the Scripps Institution of Oceanography at La Jolla, Calif., to undertake the review.

Agnes dumped record-breaking torrential rains with resultant flooding all along the Eastern Seaboard after landing near Panama City, Fla., June 19. Most river basins north of the Carolinas and east of the Appalachians as far north as New York State were affected in the week that followed. According to preliminary estimates, property damage of about $2 billion was sustained.

Because of the extent and severity of the disaster, Dr. White has called for an outside evaluation of the entire forecasting-warning-dissemination system — how it performed and how it can be improved.

NOAA is the parent agency of the National Weather Service which has the responsibility for providing the nation's weather and hydrologic services, forecasts, and warnings.

The 25-member National Advisory Committee was established on August 15, 1971, to conduct a continuing review of the progress of the nation's marine and atmospheric science and service programs and to advise the Secretary of Commerce with respect to NOAA.

—*NOAA*

# Draft Regulation Would Ban Flights Exceeding Speed Of Sound Over Land

In an action that could have a major effect on the business community and others interested in the future of air transport and its impact on the environment, the Federal Aviation Administration (FAA) has drafted a regulation banning flights of civil aircraft in excess of the speed of sound over land areas of the United States and its territorial waters. However, provision is made for research and experimental work on civil aircraft flying in excess of the speed of sound over ocean waters or other specially designated areas.

The purpose of the regulation, which has received the concurrence of the Environmental Protection Agency (EPA), is to protect the surface of the U.S. from the sonic boom generated by civil aircraft.

The regulation, which has been in process for some time, has been circulated among a number of Government departments and agencies for comment under the provisions of the National Environmental Policy Act (NEPA). When the NEPA review process is completed, it is expected that the regulation will be published in the Federal Register.

## Operating within U.S.

The ban would apply to all civil aircraft, whether of U.S. or foreign registry, operating within the U.S. FAA officials explain that it will have no effect for the greater part on existing United States civil aircraft, since the speed of these planes now is generally within the speed of sound. It would have an effect on any supersonic transports if and when they should be authorized for use over the nation's surface. The regulation, it is pointed out, does not forbid flights by supersonic craft, but only flights above Mach 1, which is the speed of sound.

The noise abatement regulation is limited to civil aircraft, including research planes engaged in civilian operations, and thus military and other public aircraft are not affected. However, it is explained, flight patterns have been established for military aircraft to avoid more populous areas.

## Questions considered

Questions relating to supersonic flight by civil supersonic aircraft over international waters in close proximity to U.S. coastal areas or international boundaries are under consideration by the Sonic Boom Committee of the International Civil Aviation Organization. The U.S. is active in this organization, and it is expected that arrangements will be made so that neither foreign nor domestic aircraft will be flown supersonically in such a manner as to permit a sonic boom to touch the surface of coastal or border areas.

The sonic boom is a sound phenomenon resembling an explosion produced when a shock wave formed by a plane traveling at supersonic speed reaches the ground. The boom creates an overpressure—that is, pressure in excess of that of the atmosphere itself—which can range from a fraction of a pound to several pounds per square foot. This is a far cry from the sound pressure necessary to rupture the human ear drum, and infinitesimal compared to lethal sound pressure caused by nearby shell or nuclear explosions. The pressure required to rupture an ear drum is more than 700 pounds per square foot, and the pressure that kills is rated at about 5,000 pounds per square foot and upwards.

Dr. Alvin F. Meyer, Director of the Office of Noise Abatement and Control of the Environmental Protection Agency, says there is no real evidence that the sonic boom creates any physiological hazards to human health. But he points out that where the overpressures are severe it causes all kinds of startle effect, irritations, and trouble, such as interrupting sleep, disturbing communication, and interfering with the normal activities of people. Because of this, it has sometimes been the cause of many complaints.

Considerable controversy has developed whether the sonic boom has any appreciable effect on animal behavior and life. The FAA reports that animal studies indicate that sonic booms from aircraft operated at the intensity levels expected from the SSTs have little or no effect on the behavior and productive ability of farm-raised animals, including mink. The agency says it appears reasonable to expect that bird and animal life in ocean areas will not be significantly affected by sonic booms generated by such aircraft, since the impact is similar to that of thunder.

## High seas

Studies indicate, the FAA explains, that the sonic boom at anticipated SST intensity levels will not appreciably affect the environment over the high seas because the forces generated by the boom over large water bodies are not significant in comparison with those present in the normal motion of water or in wind or storms. A sonic boom penetrating below the water surface is not believed to be different from the sounds already in the water. For these reasons, the effect of the sonic boom over ocean areas is looked upon as different from that over land.

The FAA says experiments have verified that the SST-level sonic boom has no effect on slower aircraft in flight. Structural damage to boats is regarded as highly unlikely because they have been designed and built to withstand far greater forces.

The agency discusses two alternatives to its regulation. One would permit higher speeds than Mach 1 and undertake to limit the level of the sonic boom that might be generated on the surface. This was ruled out because of studies showing that even low levels of the sonic boom over land at infrequent intervals are not considered tolerable by a large portion of the public. The other would prohibit supersonic flight by civil aircraft over land areas entirely, thus limiting supersonic flight for testing purposes to offshore operations. This was rejected because, according to the FAA, it would impose extremely severe burdens on aircraft manufacturers in certain stages of aircraft research or development.

### Protecting land

After reviewing a number of proposals dealing with the sonic boom, the FAA concludes that to protect the land surface from the boom, so far as regulation can do so, the most effective procedure is to prohibit flight in excess of Mach 1, except under expressly stated and well-supervised conditions.

The exception provides for the designation of specially designated test flight areas where experiments can be conducted to determine characteristics of the sonic boom produced by specific aircraft, and to establish a speed and the conditions under which aircraft would have to be operated to assure that a sonic boom would not reach the surface.

In response to comments insisting that no authority for flights by civil aircraft in excess of the speed of sound should be permitted under any conditions, the FAA says it believes the 1958 Federal Aviation Act and the National Environmental Policy Act, under which the regulation is being issued, encourage environmentally acceptable technological development.

The agency explains that if it can be demonstrated that an aircraft can be flown at supersonic speeds without generating a surface-hitting sonic boom, there is no valid reason for restricting regular operations of such a plane. Therefore, the regulation provides for authority for regular operations if such aircraft are developed.

## *Nutrient-Rich Coastal Upwelling Probed Off Oregon As Fish Supply*

Oceanographers and meteorologists are investigating along the Oregon coast a sea phenomenon known as "coastal upwelling," which occurs along the west coasts of most continents. These regions comprise a major source of living resources in the ocean, with perhaps 50 percent of the world's fish supply produced there.

The investigation is being conducted by scientists aboard the NOAA Ship *Oceanographer* of Commerce's National Oceanic and Atmospheric Administration along with Oregon State University's research vessels Cayuse and Yaquina and one research aircraft from the National Center for Atmospheric Research.

Coastal upwelling, according to Dr. David Halpern, a physical oceanographer with NOAA's Pacific Oceanographic Laboratory at Seattle, is caused by a combination of events working in unison. When the winds blow from the north, the surface layer of the ocean flows away from the coast, with the result that cold subsurface water rises to the surface near the coastline. This upwelled water, which is rich in nutrients, reacts rapidly with sunlight to produce large amounts of microscopic plants that become the primary food source for fish.

### Water density

In addition to Dr. Halpern, the scientific party aboard the *Oceanographer* consists of scientists from the Pacific Oceanographic Laboratory, Florida State University, New York University, and the National Science Foundation.

The research vessels will be used extensively to measure the density of the water and its variations, and to deploy and recover special-purpose buoys that are instrumented to measure temperature, currents, winds, pressure, and other sea elements. The aircraft will monitor ocean surface temperature, atmospheric pressure, and winds.

The project is one phase of the Coastal Upwelling Ecosystems Analysis program, a combined physical, biological, and chemical research program that is supported principally by the International Decade of Ocean Exploration office of the National Science Foundation with additional support from the National Oceanic and Atmospheric Administration and the Office of Naval Research. —*NOAA*

## New Sea Projects Awarded Grants

Two of the four educational institutions designated by the Commerce Department last year as "Sea Grant Colleges," have been awarded new Sea Grants which, along with matching funds from non-federal sources, will support a wide variety of marine related activities in research, education, and advisory service.

The University of Rhode Island has been awarded $1,190,000 to conduct its fifth year of Sea Grant activities. Oregon State University has been awarded $1,793,700 to conduct its fifth year of such activity also.

Rhode Island's Sea Grant research includes projects in coastal resources, natural fisheries, aquaculture, and marine foods and drugs. The school is conducting an integrated approach to developing a systems model for resource problems of Narraganset Bay, vital to which is a physical monitoring program called Bay Watch. Another group of projects is concerned with economic and social aspects of coastal zone use—petroleum drilling, recreational use, waste disposal, and power generation.

### Research projects

Oregon's research projects include aquaculture, coastal oceanography, development of commercial fishing methods and gear, marine bio-medicinals, marine economics, marine fisheries, ocean engineering, ocean resources law, and seafood science and technology.

Oregon State's marine advisory program provides a link between users of marine technology and developers of the information. Marine extension agents, responsible geographically for the entire Oregon coast, are stationed in three coastal communities. Their work is supported by a team of specialists in economics, information transfer, oceanography, seafood technology, fisheries, recreation and marine science education.

### Helping industry

Oregon State has concentrated on helping the Northwest fishing industry, from fishermen to processors, improve income through more efficient fishing gear, better processing techniques, improved quality control, and modern management methods. Cooperation with the University of Oregon Law School has brought definitions and interpretations of coastal and high seas law understandable to the entire spectrum of users. OSU's marine advisory service program is considered a model for the nation.

*—NOAA*

# Two Pollution Monitoring Devices Mark Big Advance

A significant advance has been made in air pollution detection and measurement that will be of major importance to the business community and citizens in areas where smog is a problem, and to officials and organizations concerned with air pollution.

Scientists at Commerce's National Bureau of Standards have developed a new and improved method for monitoring nitric oxide from such sources as auto exhausts and emissions from electric power plant stacks.

And a sulfur dioxide pollution monitoring device in which several manufacturers have already shown interest has been developed by the Bureau.

The new method is described as simpler and more economical than existing means of monitoring nitric oxide emissions, and is not subject to interference from other contaminants in air samples. The procedure is said also to have an exceptionally high sensitivity for measuring nitric oxide, reaching three parts per million. With further improvements, it is expected that it can be extended to the parts per billion range.

Basically, the method is described as the use of an infrared laser light, which ordinarily would not have the proper wave lengths to be absorbed by nitric oxide. However, by applying a magnetic field to the nitric oxide, the laser light will be absorbed, and the greater quantity of nitric oxide present the more of the light that will be absorbed. By this means, the amount of the gas in the air sample is measured.

While the method relates entirely to nitric oxide, it is regarded as of major importance, since the gas is one of the more significant air pollutants, along with sulfur dioxide, carbon monoxide, and a variety of others. Nitric dioxide is the precursor to nitrogen dioxide, the trigger molecule in photochemical smog formation. When high levels of the gas are present, eye irritation may occur.

The Bureau of Standards does not undertake to develop the instrumentation for applying the new method. What it has done has been to formulate and demonstrate the principle of the method. This opens the door to interested persons and groups, or to instrument manufacturers, who may wish to apply the method in the detection and measurement of an important element in air pollution.

### Monitoring smokestacks

The sulfur dioxide detector is based on the measurement of the fluorescence of that element in air. The most obvious application of the new device is in the monitoring of smokestack gases. A recent California law limits the sulfur dioxide concentration in stack gases to 300 parts per million and similar laws are being considered by other states. No present instrumentation measures such concentrations with high reliability.

About 80 million tons of sulfur dioxide are released into the atmosphere each year mainly through the burning of sulfur-bearing coal and oil and through such industrial processes as oil and metal refining. Concentrations as low as a few parts per million can cause breathing difficulty, kill plants, leach limestone and degrade paper and leather.

The monitor was developed by Hideo Okabe and Joseph Ball of the Bureau of Standards' Physical Chemistry Division, and Paul Splitstone, a guest worker at NBS from Alma College in Michigan.

*—National Bureau of Standards*

# Second Cold Water Eddy Marked Off Georgia May Affect Weather

Oceanographers have marked a huge cold water eddy which broke through the Gulf Stream from the North Atlantic and is headed south, another in an apparent series of massive bodies of water which may affect Atlantic coast weather.

The eddy is similar in nature and extent to an earlier one which may have been absorbed by the Gulf Stream. It is now about 300 miles due east of Savannah, Ga., and moving south at the rate of approximately two miles a day.

The new eddy is so huge that its total volume is estimated to equal the amount of water in the Gulf Stream flowing past Cape Hatteras, N.C., in about 10 days. The Gulf Stream's volume approximates that of 2,000 Mississippi Rivers, with a flow of 100 billion tons of water per hour, 22 times as large as all the rivers of the earth.

Purpose of marking the eddy is to be able to identify it during later surveys as it moves southeast toward Florida.

High visibility orange-painted 55-gallon oil drums filled with polystyrene foam are being used as markers. A punctured drum suspended 100 feet below by wire rope is expected to act as a drag and help prevent the surface drum from floating away. In addition, the counter-clockwise motion of the eddy may help maintain the marker buoys within its 220-mile circumference.

## Cut in two

The earlier eddy was estimated to have a circumference of 250-300 miles with a diameter of 85 to 100 miles.

Before the first eddy was literally cut in two as it climbed the submerged continental shelf 250 miles east of St. Augustine, Fla., Philip L. Richardson of the University of Rhode Island's Graduate School of Oceanography, who was aboard the ship which spotted that eddy, estimated that its depth was at least 9,000 feet or almost two miles.

The eddies generally maintain a circular form as they revolve counter-clockwise, although at times they may become somewhat elongated. Their formation results from the unpredictable fluctuations which occur in the course taken by the Gulf Stream as it moves from the Straits of Florida past Cape Hatteras, its volume inexplicably increasing tremendously as it does so, and then northeast toward Europe.

## Meander breaks off

Oceanographers refer to the fluctuations in the Gulf Stream's normal course as meanders. When part of a meander breaks off, an eddy is formed. Colder water north of the Gulf Stream becomes encircled by the warm Gulf Stream, producing a cold water eddy surrounded by warm Gulf Stream water. If this eddy breaks through the Gulf Stream, the encircled cold water is borne south into the warmer waters of the Atlantic's Sargasso Sea.

Dr. Alan E. Strong, the oceanographer in charge of the study for NOAA's National Environmental Satellite Service, said the two eddies which have been observed this year differ markedly from the few other Gulf Stream eddies which have been studied in that they have been moving in a comparatively straight line down the Atlantic coast. Other eddies have been observed moving out to sea, especially the eddies north of Bermuda being studied by the Woods Hole, Mass., Oceanographic Institution.

Other eddies have been detected north of the Gulf Stream that contain warm water that drift also toward the North American continent and apparently slowly dissipate in the cold waters of the Labrador Current south of Long Island and Cape Cod. The warm water eddies revolve clockwise. Strong says none has ever been observed south of the Gulf Stream.

Strong emphasizes that until additional information is obtained about these huge but gentle whirlpools, oceanographers and meteorologists can only speculate about their action and their effect on the Gulf Stream and the weather.

*—NOAA*

# Environmental Report Urges Further Study Of SST Flight Effects

A 40-page report on the environmental aspects of supersonic transport flying in the stratosphere, which contains 13 recommendations for further research on such flights, has been prepared by an expert panel of the Commerce Technical Advisory Board.

Based on an 18-month study, the report is entitled "Environmental Aspects of the Supersonic Transport." The Chairman of the eight-member panel was Dr. Frederick C. Henriques, Chairman of the Board and Chief Executive Officer of The Center for the Environment and Man, Inc., Hartford, Conn. All members of the panel were from outside Government. More than 50 other scientists served in a liaison or advisory capacity.

The comments and recommendations of the panel relate entirely to supersonic aircraft flights in the stratosphere, the portion of the atmosphere in which the supersonic planes are intended to fly. The stratosphere is generally defined as that portion of the atmosphere ranging roughly from 40,000 to 160,000 feet above the earth. Commercial SSTs would fly at altitudes between this range. In contrast,

existing commercial jet aircraft cruise below this height.

Because of the increasing number of military and commercial flights that will be occurring in the stratosphere, the panel comments, "it is imperative that measurements of trace constituents of the stratosphere and of the intensity of ultraviolet light reaching the earth's surface begin immediately."

The report is on sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C., 20402. The price is 65 cents per copy.

—*Office of the Assistant Secretary for Science & Technology*

# Fishing Industry Will Benefit From Broad New Program

A broad national program to evaluate the living marine resources of waters off the United States was announced last week by Dr. Robert M. White, Administrator of Commerce's National Oceanic and Atmospheric Administration.

The program is called MARMAP for Marine Resources Monitoring, Assessment, and Prediction Program. The first set of seasonal cruises will cover 19,000 miles from the Gulf of Maine to the northern Caribbean Sea. They will be completed in early 1973.

Purpose of these cruises is to assess distribution of fish eggs and larvae. Progressively wider ocean areas will be examined and more complex research techniques will be employed in later voyages.

MARMAP is under the direction of NOAA's National Marine Fisheries Service. Participating in the current explorations are scientific personnel from NMFS fisheries centers at Woods Hole, Mass., Sandy Hook, N.J., and Miami, Fla.

## Three phases

The program will be conducted in three overlapping phases studying:

- Distribution patterns of eggs and young stages of marine species that are most sensitive to environmental changes;
- Populations of bottom-dwelling fish such as cod and flounder, and shellfish such as scallops, crabs and shrimp.
- Species living in the upper water layers such as tuna, herring and billfish.

By the end of 1973, all oceanic regions bordering the nation are expected to be surveyed.

## Biological studies

Following evaluation of the test phase of the program, the overall MARMAP operations are scheduled for activation in 1975. Of unprecedented scope and magnitude, MARMAP operations will consist of biological and physical environmental studies pursued concurrently within a single framework. The three broad subjects of MARMAP will all be covered during the ongoing pre-operative cruises, which will take place in different seasons of the year on the Continental Shelf and in oceanic areas of high biological production.

Samples of marine populations will be collected by the hundreds of thousands for both on-site and laboratory analyses of the biological and environmental factors controlling their distribution and abundance. Collecting and sorting devices will range from traditional plankton nets to automated plankton-sorting machines that free scientific personnel from tedious time-consuming chores. Specially-developed sonar and remote sensing optical and temperature devices will be used for locating and enumerating marine populations.

## Temperature record

Measurements of the physical environment will be made concurrently with biological measurements at many ocean depths, and at and above the surface. Temperatures and chemical contents of seawater will be recorded, meteorological and weather data will be collected, and currents and other underwater features will be studied. Experiments will also involve satellite-generated data and automated buoys.

MARMAP plans call for the speediest possible conversion of the masses of data thus acquired into computer forms that can be efficiently stored in and retrieved from NOAA data banks. The target of the MARMAP managers is to achieve a peak of efficiency by the 1975 target data under which data collected by whatever means is submitted for processing no more than 90 days after acquisition and available to users 90 days later.

## Wide spectrum

Users of the MARMAP data are expected to cover a wide spectrum, including national and international resource management and conservation agencies, environmental planners, the fishing fleet, the fishing industry, sport fishermen, and the scientific community. Eventually NOAA envisions a public service system that disperses a regular and timely flow of information on the basis of MARMAP-acquired data involving marine ecology.

Affiliated with NMFS in the MARMAP project are many other government agencies and components of NOAA, several international marine organizations, almost a dozen State universities, and a number of research vessels of other nations. —*NOAA*

# Patents Of Special Interest

Recent patents issued by the U.S. Patent Office included:

**Gripping and debranching felled trees.** Provides for gripping and debranching felled trees. The tree is gripped by a gripping member and lifted from the surface of the ground to a higher plane, in which it is moved in its longitudinal direction through or beyond a debranching means, the gripping member and the debranching member being brought simultaneously into contact with the felled tree on the ground, and the branches and knots of the tree are then severed from the tree trunk by the debranching member.

An apparatus is provided including a frame structure for horizontal and vertical movement on a support structure, a feed means capable of being moved along the frame and a gripping member and a debranching member which are securely attached to the frame. The debranching member comprises an upper and a lower tool, which are separated from each other, and comprise an elongated chain of members provided with cutting edges, and are pivotally connected to each other with respect to the longitudinal extension of the tool. The members are rotatable in relation to each other between a position in which the tool is substantially straight and a second position in which the tool is curved at a certain radius, and form a continuous edge facing the conveying direction, irrespective of their mutual position. Patent No. 3,659,636 issued to Erik Helmer Erikksson and others of Sweden and assigned to Mo Och Domsjo Aktiebolag, Ornskoldsvik, Sweden.

**Jet engine sound suppressor.** An elongated tubular jet engine nozzle including inner wall surfaces, sound wave trap means extending along and spaced about said inner-wall surfaces operative to effectively trap and absorb a majority of sound waves incident along paths inclined 15 degrees or more relative to the center line of the nozzle. The nozzle includes rigid sound wave reflecting surfaces spaced along and about the inner wall surfaces of the nozzle inclined at least 10 degrees relative to the longitudinal center line of the nozzle and the reflecting surfaces are operative to reflect sound waves moving generally axially of the nozzle and toward the remote inner wall surfaces and the associated sound wave trap means along paths inclined more than 15 degrees relative to the center line of the nozzle. Patent No. 3,666,044 issued to Claud R. Killian, R.F.D. 2, Hayesville, N.C.

**Device for delimbing trees.** A device for delimbing felled trees with which a tree is drawn through the device and a blade cradle for supporting the trunk of the tree and for cutting off the branches on substantially the lower or underhalf of the tree as the tree progresses through the device, together with a similar blade cradle mounted on a swinging arm which when lowered causes the blades to engage the upper half of the tree and cut off the limbs, the tree being drawn by a tractor and the swinging arm being lowered by mechanism actuated by the movement of the tree. Patent No. 3,672,413 issued to Eino J. Jouppi, Isabella, Minn.

**Pneumatic cement gun machine.** A cement gun machine has a hopper subtended by a rotary transport bowl which is divided into radial compartments. The bowl receives dry cement mixture from the hopper, and moves it to a station where the mixture is pneumatically discharged into a delivery hose. A structure within the hopper traps cement dust and prevents it from escaping into the ambient atmosphere. Means are provided for introducing measured quantities of accelerator material into the cement mixture in the transport bowl. Patent No. 3,672,646 issued to James D. Burtin, Lebanon, Mo., and assigned to Detroit Tool and Engineering Co., Lebanon, Mo.

Abstracts and drawings of patents are published as they are issued in the *Patent Official Gazette* each Tuesday. More than 1,600 patents are issued each week. Trademarks are published in the *Trademark Official Gazette*. Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, GPO, Washington, D.C., 20402. A microfiche Patent Subscription Service is available from the National Technical Information Service, Springfield, Va., 22151.

# Science Calendar

**August 21-25—Boulder, Colo.**—National Bureau of Standards. Thirteenth International Conference on Low Temperature Physics. University of Colorado.

**Sept. 20-22—Gaithersburg, Md.**—National Bureau of Standards. IEEE-TAP Environmental Conference.

**Oct. 2-6—Gaithersburg, Md.**—National Bureau of Standards. Third International Congress on Marine Corrosion & Fouling. Sponsored by the Permanent International Commission for Research on Preservation of Materials in the Marine Environment in cooperation with NBS, Maritime Administration, Office of Naval Research, and Naval Oceanographic Office.

**Oct. 17-18—Gaithersburg, Md.**—National Bureau of Standards. Association for Computing Machinery, Special Interest Group on Computer Systems Installation Management.

**Oct. 30-Nov. 1—Gaithersburg, Md.**—National Bureau of Standards. "Dimensional Accuracy in Mfg."

# INTERNATIONAL COMMERCE REPORT

- U.S. Ophthalmic Trade Mission Reports
- Washington Official Trade Briefs
- New Zealand Expects Upswing
- Dominican Economy Back To Normal
- Canada Requires New Export Declaration

# Import Advance Widens U.S. Trade Deficit

U.S. foreign trade increased in the first six months of 1972, but the rise in imports outstripped the export advance. The trade position thus deteriorated further as business cycle developments tended to stimulate U.S. imports without a comparable boost to the nation's exports.

Imports exceeded exports through June by $6.7 billion at an annual rate, compared to the $2 billion deficit recorded in 1971. The imbalance had increased in each of the past three quarters, but the worsening in April-June from the preceding period was due almost entirely to higher import prices. Prospects are for an improvement in the U.S. trade position in the second half, although for the year a larger deficit than in 1971 will be recorded.

In January-June, exports were running at a seasonally adjusted annual rate of $47 billion, 6 percent greater than in the same period last year. Compared with the full year total for 1971, the export gain was 8 percent. Imports increased 19 percent from first half 1971 levels, to a rate of $53.7 billion. The growth from last year's total was 18 percent.

Sluggish economic conditions in most of our overseas markets continue to hold down the rate of advance in U.S. exports. Considerable excess industrial capacity exists among the United States' major trading partners as economic growth has generally been moderate. Most of this year's export advance was in shipments to Canada. Since the abnormally high level recorded in January, exports have shown no appreciable upward or downward movement. Although the U.S. competitive position was enhanced by last year's international monetary realignment, the beneficial effect of dollar depreciation on U.S. exports has so far been overshadowed by the lack of economic vigor abroad.

The major reason for the sharp import rise in the first half was the more buoyant pace of business activity in this country compared with the same period last year. There was also a significant price effect as the value of purchases from countries whose currencies appreciated relative to the dollar rose steeply. In fact, the volume of imports has been on a slight downward trend since January despite strong U.S. economic growth, though, as mentioned above, the level is much higher than a year ago. This development suggests that higher foreign prices resulting from the currency realignment are beginning to dampen somewhat U.S. import demand. The import unit value index rose 6 percent over the January-June 1971 level, three times the rise in the export index.

It is also possible that the sluggishness in inventory building during much of 1971 and in the first quarter is restraining U.S. demand for foreign products.

## Nonfarm shipments advance

Exports of nonagricultural products, which account for more than 80 percent of U.S. shipments abroad, rose to $19.1 billion in the first half of this year, an increase of 5 percent from January-June 1971. Compared to the strike-affected second half, however, the gain was almost 10 percent.

After sluggish behavior in 1971, machinery sales recovered to account for two thirds of the nonfarm export rise from last year's first half level. Some of this increase consisted of strike makeup shipments but foreign demand, particularly in Canada, also expanded. Following a strong increase in July-December, exports of engines and agricultural machinery again surged, with shipments to Canada accounting for almost all of the rise. Sales of temperature control machinery also posted substantial gains. Larger sales of radio and television apparatus to Canada, Mexico, and Taiwan boosted exports of telecommunications equipment. Deliveries of construction equipment, particularly to Canada and the American Republics, continued the increase of the past two half-year periods.

## Aircraft exports decline

Although rising from the depressed July-December level, shipments of transport equipment remained almost $100 million below those recorded in January-June 1971. The downturn was attributable largely to the sharp fall in aircraft deliveries. Sales of both jumbo jets and the smaller passenger transports declined, as did military sales. In contrast, shipments of parts rose substantially. Deliveries of automotive products to Canada advanced after a drop in the preceding half-year period. Over four fifths of the increase was in exports of parts and engines to U.S. subsidiary plants, reflecting gains in Canadian auto production and continued high demand here for compact and subcompact autos which predominate in Canadian output. Shipments of trucks also increased but passenger car exports to Canada were slightly lower.

Following the sharp drop in the last half of 1970, chemical exports gained moderately in both halves of last year and rose again in January-June. Deliveries of organic chemicals, especially to Canada and to the American Republics, led the rise. The outflow of manufactured fertilizers advanced by one third, with most of the increase going to India and Brazil.

Sales of most industrial materials were above levels recorded in the strike affected July-December period but generally showed little change from those in the first six months of 1971. Although coal exports rose $100 million above the second half value when shipments were curtailed by a miners' strike, there was no change from year-earlier levels. Reduced demand and lower prices depressed ferrous scrap shipments, especially to Japan, while steel exports remained basically unchanged from those recorded in the two previous six-month periods. In contrast to these declines, lumber and log shipments increased $100 million since a year ago. Most of this advance reflected greater construction activity in Japan and heavy demand there for hardwood used in the installation of bowling alleys.

## Farm exports increase

Deliveries of agricultural products climbed to $4.4 billion in January-June, 9 percent above the previous first half total and 15 percent above the strike-affected July-December period. Grain and tobacco shipments paced the expansion.

Exports of corn, which had risen 11 percent from the first to the second half of last year, climbed by two fifths as shipments to Western Europe and the Soviet Union

soared. Rice deliveries, especially to Bangladesh and Indonesia, also expanded sharply. Wheat shipments were below year-earlier levels as good crops abroad depressed foreign import demand.

Tobacco sales were significantly higher in January-June, largely because supplies that ordinarily would have been loaded during the peak shipping months late last year were delayed by the strike and not exported until early 1972. Soybean deliveries were also substantially above last year's comparable levels, but unchanged from July-December. Sharply higher prices boosted the value of exports of hides, although quantities showed only marginal change from a year ago.

## Consumer imports rise

Continuing on their strong uptrend in recent years, imports of consumer goods climbed steeply in January-June. At a seasonally adjusted level of $9.6 billion, these purchases were 24 percent higher than in the comparable period last year and one fifth above the total in the second half of 1971. Much of the strong increase in these arrivals can be attributed to the acceleration in U.S. personal consumption expenditures on goods this year, but part of the rise was due to higher prices for some products stemming from the revalation of key suppliers' currencies. Imports (excluding cars from Canada) accounted for 6.2 percent of consumer expenditures on goods in the first six months, compared to 5.3 percent in 1971.

The inflow of automobiles and parts from all sources accounted for more than one third of the rise in consumer goods imports from the first half of last year. Arrivals of new cars from U.S. subsidiaries in Canada continued to advance, reflecting further gains in auto sales here. A strong increase was also noted in deliveries of automotive parts and engines from Canada.

Although sales of foreign-type cars in this country declined compared with levels recorded a year ago, the quantity of imports remained even with the January-June 1971 total, with the result that inventories were built up. The value of these imports, however, climbed by one fifth through June, due entirely to higher prices and relatively greater purchases of more expensive models. Foreign-type cars accounted for 14.4 percent of total U.S. car sales in the first half compared to 15.3 per cent in each of the two preceding years, reflecting the increased competition from the sub-compacts introduced by U.S. manufacturers.

Imports of consumer electronic products expanded by one third to almost $1 billion. Purchases of tape recorders and players, mainly from Japan, posted the largest rise. Although Japan also remains the largest supplier of imported television sets, nearly all of this year's strong increase in TV arrivals was from Taiwan. Receipts of color sets from Japan declined in quantity, largely as the consequence of higher prices due particularly to the appreciation of the yen.

Exceeding levels in either half of 1971 by more than one fifth, imports of clothing, principally from Japan, Taiwan, Hong Kong, and Korea, continued to advance strongly. Footwear purchases also grew rapidly, despite a drop in receipts of non-leather shoes from Japan.

## Industrial materials expand

Imports of industrial supplies and materials expanded by 16 percent over January-June 1971 levels, reaching a seasonally adjusted total of $9.6 billion. In general, the increase was related to the upturn in U.S. industrial production but was amplified by unusually strong demand for petroleum and lumber.

Crude petroleum imports climbed by almost three fifths, reflecting growing U.S. energy requirements, lower domestic production, and expanded quotas. Virtually all major suppliers shared in the advance, particularly those in the Near East and Africa. The increase in receipts of petroleum products consisted entirely of distillate fuel oil from Venezuela and the Caribbean area. Entries of residual fuel oil declined.

Continued record levels of housing starts and other construction activity stimulated a large rise in lumber imports, mainly softwood grades from Canada. Higher prices

### U.S. Exports Of Selected Principal Products

*Millions of dollars, seasonally adjusted*

| | 1971 | | 1972 |
|---|---|---|---|
| | Jan.-June | July-Dec. | Jan.-June |
| **Nonagricultural products, total** | 18,180 | 17,591 | 19,129 |
| Nonelectrical machinery | 4,253 | 4,264 | 4,616 |
| Electrical machinery | 1,489 | 1,580 | 1,753 |
| Chemicals | 1,889 | 1,945 | 1,970 |
| Automobiles and parts | 1,558 | 1,520 | 1,665 |
| Aircraft and parts | 1,836 | 1,532 | 1,556 |
| Coal | 507 | 406 | 506 |
| Iron and steel-mill products | 405 | 389 | 407 |
| Paper and manufactures | 340 | 346 | 362 |
| Logs and lumber | 242 | 238 | 342 |
| **Agricultural products, total** | 4,024 | 3,811 | 4,367 |
| Soybeans | 669 | 740 | 738 |
| Corn | 353 | 391 | 542 |
| Wheat* | 556 | 449 | 517 |
| Tobacco, unmanufactured | 312 | 200 | 424 |

* Not seasonally adjusted.

## U.S. Imports Of Selected Principal Products

*Millions of dollars, seasonally adjusted*

| | 1971 | | 1972 |
|---|---|---|---|
| | Jan.-June | July-Dec. | Jan.-June |
| **Consumer goods**, total | 7,767 | 7,980 | 9,642 |
| Autos, parts, engines | 3,392 | 3,730 | 4,075 |
| Clothing | 761 | 763 | 933 |
| Radio and television sets | 498 | 424 | 612 |
| Footwear | 372 | 386 | 436 |
| **Industrial supplies**, total | 8,280 | 8,642 | 9,584 |
| Iron and steel | 1,394 | 1,324 | 1,290 |
| Crude petroleum* | 765 | 1,113 | 1,191 |
| Residual fuel oil | 554 | 569 | 528 |
| Industrial, agricultural chemicals | 484 | 465 | 534 |
| Lumber | 317 | 357 | 511 |
| **Capital goods**, total | 2,446 | 2,502 | 3,212 |
| Machinery | 1,941 | 1,950 | 2,526 |
| Trucks and buses | 386 | 448 | 546 |
| **Foods**, total | 3,238 | 3,130 | 3,549 |
| Meat | 529 | 518 | 581 |
| Coffee | 612 | 631 | 565 |
| Fish | 407 | 470 | 550 |
| Sugar | 384 | 378 | 473 |

* Not seasonally adjusted.

resulting from heavy demand contributed significantly to the increase in value. Purchases of plywood from Korea and Taiwan also grew strongly.

Imports of industrial and agricultural chemicals climbed 14 percent, mainly on the strength of greater arrivals of organic compounds and manufactured fertilizers. Entries of plastic materials and resins also advanced. On the other hand, arrivals of iron and steel-mill products fell. The decline of one tenth was from the extremely high level reached in January-June 1971 when steel inventories were being expanded in anticipation of a possible strike in the industry.

### Capital goods purchases surge

Imports of capital equipment, after only a small increase in the second half of last year, accelerated sharply in January-June. At $3.2 billion, seasonally adjusted, these arrivals exceeded their level in the first six months of 1971 by 31 percent and the July-December total by 28 percent. So far this year, imported capital goods (excluding trucks) have accounted for 9.4 percent of producers' durable equipment expenditures compared to 8 percent in 1971.

Business machines led the advance in machinery purchases. These arrivals climbed by more than $100 million, much of which consisted of computer parts from recently opened U.S.-owned facilities in Canada. The inflow of textile machinery again rose rapidly as deliveries of knitting equipment, mainly from West Germany and France, continued to expand. Most of the one-half rise in receipts of electronic components represented imports of transistors and semiconductor devices from Mexico and the developing countries of Southeast Asia.

Trucks from Canada expanded strongly, as did entries of small-sized models from Japan. Purchases of aircraft parts climbed again, boosted by entries from Canada and jet engines from the United Kingdom.

Imports of foods totaled $3.5 billion in January-June, one tenth above the comparable period a year ago and 13 percent higher than in the depressed second half. Imported foods represented 5 percent of total U.S. consumers' expenditures on food so far this year compared to 4.7 percent in all of 1971.

A steep rise in imports of fish accounted for about two fifths of the increase in food deliveries. Heavy consumer demand boosted purchases on a volume basis and, because of tight supplies, higher prices added to the value increase. Much of the large rise in sugar imports stemmed from purchases early in the year to replenish inventories drawn down during the dock strike. Imports of fresh and frozen beef, mainly from Australia, also recorded an increase, reflecting the liberalization of quotas in March. In a further move to assure adequate supplies, the quotas were suspended in late June.

### Area trade gains

Trade with Canada advanced rapidly in both directions, stimulated by buoyant economies in the two countries. Exports to Western Europe recorded only a slight gain, as economic activity there showed only moderate advances. Imports from the area, on the other hand, rose strongly, led by greater machinery purchases. Trade with Japan recorded a large increase over year-earlier levels, with imports advancing nearly twice as fast as exports. Shipments to Australia and Oceania fell, but imports from the area rose steeply.

The exchange of goods with the developing areas also advanced. Trade with the American Republics showed substantial gains, after little change in 1971. Imports from the Near East, East and South Asia, and Africa soared, but exports to the latter two areas dropped. Shipments to the Near East recorded a small increase despite a falloff in exports to Israel.

SPANISH CUSTOMERS LISTEN—*In Barcelona, mission member E. W. Jensen, at right in photo above, explains to optical industry officials in Barcelona how his firm's polishing pad works. Second picture shows mission member Asher Nesin, right, in Madrid talking through interpreter (center) with local businessman about abrasives for grinding and polishing.*

# U.S. Ophthalmic Industry Mission Looks Into Three European Markets

Today, unprecedented export opportunities exist for U.S. manufacturers of glassworking equipment and supplies—in Europe, where industry sales potential surpasses that of the United States a decade ago. This conclusion by one of the eight U.S. ophthalmic industry participants on their recent trade mission to Portugal, Spain, and Italy was shared by other members of the group.

The U.S. businessmen manufacture such items as diamond wheels for generating and finishing glass and optical lenses; fine abrasive powders for grinding and polishing optics; precision grinders, generating equipment, cutters, edgers, blocking material and equipment, and lenses.

According to the Commerce Department's Ted Fiedler, director of the mission, the participants had sizable and receptive audiences in all four cities visited—Lisbon, Madrid, Barcelona, and Milan. Particular interest was noted, he said, in machinery and abrasives, and in "high-ticket items such as automated generators."

An unexpected benefit of the on-the-spot promotion tour was the business developed by some of the team with buyers from the marble industry in all three countries—as much of the equipment and material used in the optical industry is also employed in polishing marble. The mission members quickly broadened their pitch and adapted to the new sales potential.

## Interest in Spain

Spanish suppliers export eyeglass frames and sun glasses to the United States, and industry officials with whom mission members talked were impressed by the U.S. product lines represented. There is a clear desire to purchase American glass know-how, the business visitors observed.

Italy also has a large optical industry—one that is expected to expand some eight percent annually over the next decade. Buyers there placed initial orders with the mission that will undoubtedly lead to a good "repeat business," Fiedler pointed out. Dr. Mario Lozza, president of Italy's National Association of Optical Manufacturers, told the mission that Italy welcomes, and even solicits, U.S. production aids, machine tools, and supplies—a fact that seemed to be borne out by the interest shown when the group attended part of MIDO-72, the third largest ophthalmic show in the world.

During an interview in Lisbon with the president of the Ophthalmic Guild, mission members were told that the Portuguese export eyeglasses worldwide and are interested in the kinds of production goods represented by the mission

INTERVIEW IN LISBON—*During visit to Portugal, mission members Howard W. Heggam, right, and George Metzger display their firms's abrasive compounds to a prospective customer.*

companies. Also, he said, the current Portuguese Government medical program is being expanded to provide eyeglasses for school children.

Fred Larner, Shuron Continental, Rochester, N.Y., evaluated his firm's participation in the mission: "From my company's standpoint, we will derive many benefits for increased sales in the countries visited, and future trips will be planned to follow up contacts made."

Other companies on the mission, and their representatives, were: AIT Industries, Inc., Optical Machine Division, Skokie, Ill., Frank J. Morok; Geoscience Instrument Corp., Geos Materials Technology Division, Mount Vernon, N.Y., E. W. Jensen; Micro Abrasives Corp., Westfield, Mass., Asher Nesin; James H. Rhodes & Co., Chicago, Howard W. Heggem and George Metzger; Universal Shellac & Supply Co., Electro Optics Division, Hicksville, N.Y., Anthony Sulgaski; and Univis Inc., Fort Lauderdale, Fla., Richard M. Owen.

## Metallurgy Mission Scheduled For Mexico

The Commerce Department is organizing a trade mission to promote sales of U.S. metallurgy equipment and instrumentation in three important Mexican centers Nov. 13-23.

The Mexican metals industry is growing. Specialized and technologically advanced instruments, welding equipment, and metalworking machinery are imported by South of the Border users.

Of special interest is the decision by the Mexican Government to proceed with construction of the Las Truchas steel plant involving an investment of about $840 million.

U.S. firms are invited to participate in the trade mission. Write: Trade Missions, BIC-940, U.S. Department of Commerce, Washington, D.C., 20230; phone, E. Lee Carteron, 202-967-2051.

# Washington's Official Trade Briefs

*This article is another in a series of monthly reports outlining actions by domestic, foreign, or international agencies affecting world trade, as compiled by the Legislation and Tariff Analysis Division of the Bureau of International Commerce's Office of International Trade Policy, and by the BIC Office of International Investment.*

### THE PRESIDENT

**U.S.-USSR Commercial Commission Meets in Moscow:** The U.S.-USSR Joint Commercial Commission, established by President Nixon and Soviet leaders during the Moscow Summit Conference, concluded its first meeting in Moscow Aug. 1. In ten days of discussions, the U.S. delegation led by Secretary of Commerce Peter G. Peterson explored with their Soviet counterparts a number of proposals aimed at broadening U.S.-Soviet trade relations.

To define and clarify specific proposals, special work groups were formed. Assistant Secretary of Commerce Andrew E. Gibson chaired the group focusing on formulation of a comprehensive trade agreement. Other groups were established to facilitate negotiations with respect to reciprocal credit, lend-lease, licensing, joint projects, and a maritime agreement.

Secretary Peterson and Soviet Minister of Trade Patolichev have agreed to hold the next Commission meeting later this year.

Before returning to Washington, U.S. negotiators also met with officials of the Polish People's Republic in Warsaw to discuss the potential for substantial increases in commercial, industrial and technical cooperation between the two countries. In a communique issued at the conclusion of the discussions, both sides referred to the existence of significant possibilities for increased U.S.-Polish trade and indicated a willingness to search for new forms of cooperation through the mechanism provided by the recently established U.S.-Polish Commercial Commission.

**U.S.-Japan Trade Talks:** U.S. and Japanese officials held a series of meetings in Hakone, Japan, July 24—28. The meetings, which dealt primarily with trade issues of mutual concern, included discussions relating to the present degree of imbalance in U.S.-Japanese economic relations, and the hopes and intentions of Japan regarding further liberalization of its economy.

Ambassador William D. Eberle, the President's Special Representative for Trade Negotiations, led the U.S. negotiating team, which included Lawrence A. Fox, Deputy Assistant Secretary of Commerce for International Economic Policy.

### CONGRESS

**Senate Committee Action:** On June 19, the Senate Committee on Banking, Housing and Urban Affairs favorably reported an amended version of S. 3726, to establish a Council on International Economic Policy and to amend the Export Administration Act. The bill was subsequently referred to the Committee on Foreign Relations, which reported it on July 24 with amendments. S. 3726 was passed by the Senate on Aug. 1, and is now in House-Senate Conference.

The recent ban on cattle hide exports was the subject of hearings July 26 and 27 by the Senate Committee on Agriculture and Forestry. Official witnesses included Earl L. Butz, Secretary of Agriculture, and William N. Leston, Commerce's General Counsel.

The Committee on Foreign Rela-

tions held hearings in early August concerning U.S. ratification of the UNESCO Convention on the Means of Prohibiting the Illicit Import, Export, and Transfer of Ownership of Cultural Property.

In other developments, an amended version of S. 1798, to promote U.S. participation in international voluntary standards activities, was reported by the Commerce Committee July 14. On July 19, the bill passed the Senate with Committee amendments, thus clearing the measure for action by the House.

**House Committee Action:** On July 27, the Banking and Currency Committee reported H.R. 15989, to establish a Council on International Economic Policy. In lieu of H.R. 15989, the House passed an amended version of S. 3726 August 3. As passed by the House, the bill does not contain any provisions for establishment of a Council on International Economic Policy. The bill does, however, contain provisions which would extend the Export Administration Act of 1969, and remove the President's authority to control exportation of cattle hides. At present, the bill is in House-Senate Conference (see Page 41).

The Committee on Public Works concluded its hearings concerning Buy American legislation on July 18.

In other activity, the Subcommittee on Foreign Economic Policy of the Committee on Foreign Affairs held another hearing Aug. 2 concerning the organization of the executive branch to deal with issues of foreign economic policy. Testimony was heard from William Roth, former Special Representative for Trade Negotiations and Robert Roosa, former Under Secretary of the Treasury for Monetary Affairs.

**New Legislation:** Since the opening of the 92nd Congress, some 502 trade and related bills have been introduced. Of these, 104 contain specific quota provisions, and 49 contain general orderly marketing provisions, applicable when imports surpass stated levels of domestic consumption. Legislation not previously reported in the Official Trade Briefs column includes:

H.R. 15442, to continue for a temporary period the existing suspension of duty on certain istle; H.R. 15713, to impose a duty on imported montan wax if a product of any Communist country; H.R. 15795, to extend for three years the duty suspension on certain tanning and dyeing materials; H.R. 15798, concerning the suspension of duty on copper; H.R. 16019, to require that before import quotas on meat may be suspended or increased, the Secretary of Agriculture must act to insure that prices received by domestic beef producers will be equal to parity during the period of increased or suspended quotas; H.R. 16106, to prohibit exportation of oil when oil import restrictions are in effect; H.R. 16108, to deny the percentage depletion allowance on oil exported or imported to the United States;

H.R. 16109, to amend the Trade Expansion Act of 1962 to prohibit the sale, transfer, or exchange of the allocation of petroleum imports; H.R. 16142, to amend the Export Administration Act of 1969 to require the Secretary of Agriculture's approval of controls on agricultural commodities; S. 3864, to create a special tariff provision for imported glycine and related products; S. 3698, to foster commercial intercourse with foreign nations by promoting the development of an export trade among small businesses not now extensively exporting; S. 3726, to amend and extend the Export Administration Act of 1969 to afford a more equal export opportunity and to establish a Council on International Economic Policy; S. 3739, to establish within the Department of Commerce an Economic Adjustment Administration; and S. 3860, to amend the Strategic Materials Act concerning import controls on goods from Communist countries.

## TARIFF COMMISSION

**Commission To Study U.S. Conversion to the Brussels Tariff Nomenclature:** In response to a request by the President, the Tariff Commission has instituted a study to examine the feasibility of converting the Tariff Schedules of the United States (TSUS) to the Brussels Tariff Nomenclature (BTN). The President's request follows a recommendation by the Commission on International Trade and Investment Policy that the United States should move as rapidly as possible toward adoption of the BTN. As most trading nations of the world have adopted the BTN, the Commission pointed to the unnecessary burdens on U.S. traders and others arising from the United States' use of a tariff system that is unrelated to the BTN.

To facilitate the Tariff Commission's study, the President has instructed the Special Representative for Trade Negotiations to organize a task force consisting of Executive Branch agencies. In addition, the Special Representative has been directed to appoint a second task force, chaired by the Treasury Department, to examine and make recommendations on the problems involved in U.S. adherence to the Convention on Nomenclature. In his letter to the Chairman of the Tariff Commission, the President indicated that the Commission's report, including the draft U.S. schedules, should be submitted as soon as possible, but no later than Sept. 30, 1973.

**Public Hearings and Release of Customs Valuation Study:** On Aug. 1, the Tariff Commission released an interim staff report entitled "Customs Valuation." The report was prepared to facilitate public hearings in connection with the customs valuation procedures of the United States and foreign coun-

tries. The hearings will be held in Washington, D. C., beginning Sept. 11; San Francisco, beginning Sept. 19; and New Orleans, beginning Sept. 26. Further information may be obtained by contacting the U.S. Tariff Commission, 8th and E St., NW., Washington, D. C. 20436. Copies of the staff report (TC Publication No. 501) will be available on request from the Office of the Secretary at the above address.

The Commission's study of customs valuation procedures was initiated in April 1971 in response to a request from the Senate Committee on Finance, and its Subcommittee on International Trade. The Finance Committee requested that the Commission study the procedures of foreign countries and those of the United States with a view to developing and suggesting uniform standards of customs valuation which would operate fairly among all classes of shippers in international trade, and the economic effects which would follow if the United States were to adopt such standards.

**Escape-Clause Investigation — Pianos:** Upon receipt of a petition filed in behalf of the National Piano Manufacturers Association, the Tariff Commission recently instituted an investigation to advise the President pursuant to section 351(d)(3) of the Trade Expansion Act of 1962, with respect to pianos (including player pianos, whether or not with keyboards; excluding grand pianos).

Increased rates of duty were imposed by Presidential proclamation upon imports of the above-described pianos in 1970 following an industry investigation by the Tariff Commission.

The Commission's function under section 351(d)(3) is to advise the President of its judgment as to the probable economic effect that a termination of the current escape-clause rates of duty would have on the industry concerned.

**Escape-Clause Investigation — Brass Wind Musical Instruments:** On Aug. 7, the Tariff Commission announced initiation of an investigation under section 301(b)(1) of the Trade Expansion Act of 1962 to determine whether brass wind musical instruments and parts thereof (TSUS items 725.22 and 726.65) are, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry or industries producing like or directly competitive products. The Commission's action follows receipt of an amended petition filed by the Selmer Division of the Magnavox Co., Chicago Musical Instrument Co., E. K. Blessing Co., Inc., the Benge Trumpet Corp., and United Auto Workers Union Local 364.

**Adjustment Assistance—Firms:** Since the last Official Trade Briefs column (*Commerce Today*, June 26), the Tariff Commission opened an investigation to determine if J. Rudolph, Inc., New York, (**women's vinyl handbags**) was sustaining injury from increased imports. After examining the effect of imports, the Commission subsequently determined that the firm is ineligible to apply for adjustment assistance.

In another action, the Commission announced an affirmative finding with respect to its investigation of the V-M Corp., Benton Harbor, Mich. (**consumer electronic products**). As a result of the Commission's finding, the firm is now eligible to apply to the Secretary of Commerce for trade adjustment assistance.

**Adjustment Assistance — Workers:** Since June 21, the Tariff Commission has opend six new investigations into the effect of imports on workers at the following plants: Factory and Bow Department of United States Shoe Corp., Cincinnati, (**women's footwear**); Handley Mills, Inc., Roanoke, Ala. (**plain woven fabrics wholly of cotton**); Frank H. Pfeiffer Co., Worcester, Mass. (**women's and misses' footwear**); Denison Division of Abex Corp., Columbus, Ohio (**hydraulic presses and industrial hydraulic valves**); Otto Goedecke, Inc., Hallettsville, Tex. (**cotton yarn and plain woven fabrics of cotton**); and Archer Mills, Inc., Columbus, Ga. (**nylon hosiery**).

In its reports of five investigations on behalf of worker groups, the Commission found that the criteria establishing eligibilty to apply to the Secretary of Labor for adjustment assistance were met in two instances. Those involved in the positive determinations include workers at the following plants: Wilson Shoe Corp., Shamokin, Pa. (**women's footwear**); and General Electric Company, Utica, N.Y. (**radio receivers**). In its investigation of GE, the Commission found that workers producing **phonographs** and **tape recorders** at the Utica plant were ineligible to apply for adjustment assistance.

In two other instances, the Commission determined that the criteria establishing eligibility for adjustment assistance were not met. As a result, workers at the following plants are ineligible to apply for adjustment assistance: Remington Rand Division of Sperry Rand Corp., Elmira, N.Y. (**electronic desk calculators, electric and manual typewriters and typewriter parts**); and the Hosiery Division of Chadburn, Inc., Charlotte, N.C. (**women's hosiery of manmade fiber and panty hose**).

In the remaining investigation, the Commission found that workers producing **unrecorded magnetic tape** at the RCA Corp.'s Indianapolis plants are ineligible to apply for adjustment assistance. With respect to RCA workers producing **television tuners, yokes, and horizontal output transformers,** the Commission's vote was evenly divided (2-2). In evenly divided decisions, the President may accept the findings of either group as the Commission findings.

**Dumping Cases:** Since late June, the Tariff Commission has con-

cluded three investigations with respect to articles previously determined by Treasury to be sold in the United States at less-than-fair value (LTFV). In one investigation, the Commission announced that a domestic industry is sustaining injury from LTFV imports of **cadmium** from Japan. As a result of the Commission's decision, such imports will now be subject to special dumping duties. In two other decisions, the Commission notified the Secretary of the Treasury that U.S. industries are not sustaining injury by reason of LTFV imports of **hand pallet trucks** from France or **welded wire mesh** from Belgium.

In another action, the Commission opened an antidumping investigation with respect to LTFV imports of **instant potato granules** from Canada.

**Section 337 (Unfair Import Competition) Cases:** Following receipt of a complaint filed by the Avid Corp. of East Providence, R.I., the Tariff Commission recently opened an investigation of alleged patent infringement involving imported **passenger entertainment headsets and replacement tips (stethoscopes).** Information pertinent to the investigation may be submitted to the Commission by Aug. 28.

In another investigation, the Commission received a complaint from Multi-Med Industries, Inc., of Southfield, Mich., alleging patent infringement in the importation and sale of certain **disposable catheters.** Information pertinent to the investigation may be submitted to the Commission by Aug. 24.

## OTHER AGENCIES

**Treasury—Dumping Cases:** Since mid-June, Treasury has withheld appraisement on the following articles: **30 lb. machine finish kraft wrapping paper** from Canada; **kanekalon wigs** from Hong Kong; **perchlorethylene** from France and Japan; **color television picture tubes** from Japan; and **northern bleached hardwood kraft pulp** from Canada. Under provisions of the Antidumping Act of 1921, the Secretary of the Treasury is required to withhold appraisement whenever he has reason to believe or suspect the existence of sales at less-than-fair value (LTFV).

In three LTFV investigations, Treasury recently announced affirmative findings with respect to the following items: **bicycle speedometers** from Japan; **cast iron soil pipe fittings** from Poland; and **dry-cleaning machinery** from West Germany. All three cases have now been referred to the Tariff Commission to determine if U.S. industries are sustaining injury by reason of the LTFV sales. In another investigation, a finding of sales not at LTFV was announced by the Commission with respect to imports of **fire extinguishing foam** from Canada.

Since the last Trade Briefs column, Treasury has initiated three new antidumping investigations: **electronic ceramic packages** from Japan; **concrete reinforcing bars** from Mexico and **ceramic glazed wall tile** from the Philippines.

In other activity, the following antidumping investigations have been discontinued: **deflection yokes for color televisions** from Japan; **neopentyl glycol** from Japan; and **welded stainless steel pipe and tubing** from Japan (final).

**Treasury — Countervailing Duty Proceedings:** On June 19, Treasury issued a countervailing duty proceeding notice covering certain footwear from the Republic of Korea. Submissions by interested parties concerning the existence or nonexistence of a bounty or grant on the imports in question must be received by the Commissioner of Customs no later than Aug. 17. Section 303 of the Tariff Act of 1930 requires the Secretary of the Treasury to levy a countervailing duty equal in amount to any grant or bounty which a country bestows on its exports to the United States.

**Commerce — Adjustment Assistance:** In mid-July, the Department of Commerce announced certification of the following firms as eligible to apply for adjustment assistance as provided by the Trade Expansion Act of 1962: Otto Goedecke, Inc., of Hallettsville, Tex. (textiles); and the Duchess Footwear Corp. of Salem, Mass. Both firms may now submit adjustment assistance proposals to the Commerce Department's Office of Trade Adjustment Assistance.

**Labor—Adjustment Assistance:** Since early July, the Bureau of International Labor Affairs has announced adjustment assistance certifications with respect to workers at the following plants: Duchess Footwear Corp., Salem, Mass. (650 workers); Wilson Shoe Corp., Shamokin, Pa. (400 workers); and General Electric Co's Audio Electronics Products Department, Utica, New York (3,000 workers). The Labor Department certifications follow Tariff Commission reports to the President that the workers involved became unemployed or underemployed because of increased imports, resulting in major part from trade agreement concessions.

## International Trade Briefs

**European Community Eliminates Special Import Charges:**

Following a formal U.S. protest with the General Agreement on Tariffs and Trade (GATT), the European Community on July 31 announced the elimination of special import charges affecting nearly $40 million of imports from the United States. The special charges had been imposed primarily on agricultural products to compensate for the effects of exchange rate changes resulting from the May 1971 float of the German mark and the December 1971 Smithsonian Agreement regarding parity adjustments. Compensatory charges on most of the items included in the U.S. complaint were abolished by the Community.

## Trade Fairs, Centers

# U.S. Exhibitors Sought For Three European Shows

The Bureau of International Commerce (BIC) will mount a U.S. Exhibition at NOR-SHIPPING in Oslo, May 9-15, 1973. This biennial event will offer an exceptional opportunity for product testing, agency finding and sales by U.S. manufacturers and exporters of equipment and systems used in shipbuilding and repair facilities and in outfitting Norway's worldwide fleet.

NOR-SHIPPING '71 drew over 15,400 trade visitors from 41 countries to view products of nearly 300 exhibitors. Next year's show will be on a grander scale still and feature an International Technical Symposium. In addition, BIC's promotional program will include invitations to all major shipowners, shipyards and agents in each of the four Nordic markets.

**Apparel manufacturing equipment: Italy.** The U.S. Trade Center in Milan is sponsoring an exhibition of this equipment from March 12-16. A steadly expanding market, combined with an improving rate of exchange between the dollar and lira, provides American firms with a unique opportunity for sales of high technology, mass production garment making equipment. Industrial sewing machines and attachments, cloth handling equipment, and computer-controlled cutting and sewing machines are especially sought. With equipment purchases averaging $40 million yearly and an expanding economy, prospects for sales in the Italian market are bright. Call Don Johnson at 202-967-2795 or write him at BIC-924, U.S. Department of Commerce, Washington, D.C. 20230.

**Electronic components: Scandinavia.** The U.S. Trade Center in Stockholm will hold a week-long exhibit of electronic equipment from Jan. 29-Feb. 3. Scandinavian production of this equipment is projected to resume a strong growth pattern in the next four years. This will stimulate a substantial growth in imports of components, which in 1971 accounted for nearly three-fourths of the estimated $230 million component market in the four-country area. The outlook is especially favorable for sophisticated components used in process controls, telecommunications including microwave systems, optoelectronics, EDP peripheral equipment, and medical instrumentation. American components for these applications are second to none in design and construction and highly regarded by Nordic end-users. Moreover, prices of imported components from leading European suppliers have been increasing because of currency revaluations and inflationary pressures. U.S. firms offering unique and technically advanced components have an excellent chance to share in this expanding and lucrative area market. Call A. J. Beiring 202-967-3838, or write him at BIC-946, U.S. Department of Commerce, Washington, D.C. 20230.

## Hamburg Trade Shows Open To U.S. Participants

Hamburg, Germany, will be host to a number of international fairs and exhibitions in 1972 and 1973, which should interest U.S. manufacturers of telecommunications, boating, camping, home and horticultural equipment, and the food and clothing industries. The international boat show, for instance, will be held from Oct. 27 to Nov. 4. A similar show in 1971 attracted 128,000 visitors from 35 countries. For additional information, interested firms should contact the Representative of the City of Hamburg, Suite 8201, Empire State Building, 350 Fifth Ave., New York, N. Y. 10001, (212-565-5281).

## Commerce Broadens Coverage Of Foreign Trade Fair Prospects

The Commerce Department's Office of International Trade Promotion is publishing in-depth reports on foreign trade fairs where the Department is not officially participating, but which offer export opportunities for U.S. firms that participate on a private basis.

These comprehensive "International Trade Fair Summary Reports" contain data on individual fair attendance, exhibitors, major product categories, physical characteristics, fair management address, as well as exhibitor reactions, buyer interests, and predicted trends as reported by U.S. Foreign Service Officers assigned to cover these fairs.

### Worldwide sources

These summary reports are received by Commerce from U.S. Embassies all over the world and are made available through the monthly publication, *Index to Foreign Production and Commercial Reports.* This Index is a computer printout listing all commodity, industry, and market information received by Commerce during the preceding month. These standardized "International Trade Fair Summary Reports," systematically registered under a 400 series identification number (e.g. 72-03-401), are incorporated into this computer printout by commodity, country, and document.

This Index is available to American firms located in the United States. Write: Office of International Trade Promotion, BIC-976, U.S. Department of Commerce, Washington, D.C. 20230.

## Worldwide Business Outlook

# New Zealand Still Sluggish, But Recovery Is Forecast

New Zealand is winning its bout with stagflation and the mild recession seems to be bottoming out. Although business is still sluggish, a recovery is forecast by the U.S. Embassy in Wellington.

New Zealand has been passing through a period of stagflation—slow growth and rapidly rising prices. For the year ended March 1972 GNP rose 14 percent, but this was made up of a 13 percent increase in overall prices and only 1 percent real growth.

### Government measures

The slow growth of production has been partly the result of the government's efforts since mid-1970 to restrain inflation by restrictive fiscal and monetary policies. As demand slowed, these measures have been eased somewhat and greater emphasis in fighting inflation has been placed on direct controls of prices and incomes, culminating in March 1972 in a broad wage-price stabilization scheme.

At the same time, as a mild recession developed the Government began to take action to increase expenditure and output, including subsidies to farmers, tax relief to companies and increases in social security benefits.

The situation has now begun to improve. Wage and price indicators are showing declining rates of increase. Indications of recovery are less firm, but the economy while still sluggish seems to have passed the trough of the recession. It should be further stimulated by the budget, which Government leaders have promised will be an expansionary one. The forecast for the year ending March 1973 is for GNP growth of 8.5 percent, composed of 3 percent real growth and 5.5 percent price inflation.

Personal consumption increased about 10 percent during 1971-72. Since total private disposable income (in current dollars) was up 13 percent, this implies a fairly sharp lift in savings. This trend may be checked by the budget, since expected increases in social security benefits and reductions in individual tax rates ought to stimulate consumption more than savings. Also, a general economic recovery should boost consumer confidence.

Private capital formation grew only 5 percent in 1971-72. It is still down, but indicators suggest that the slump in private investment is ending. Issuance of building permits for private dwellings has been rising steadily for five months.

### Firm recovery

In the first quarter of 1972, plant and equipment orders placed overseas also showed a firm recovery. Another sign of renewed business confidence is the stock market, which emerged from the doldrums in May and has risen to its highest level since 1970. A 10 percent rise in investment spending is foreseen in 1972-73.

The consumer price index and index of wage rates peaked last year, and have begun to subside —wage rates sharply, consumer prices with discouraging slowness.

The recession has been accompanied by a rise in registered unemployment to over 5,000 persons —tiny by international standards but big enough to be a political issue in New Zealand. Indications are that this will increase by another thousand or so for seasonal reasons, and then decline as business picks up, without reaching the 8,000 peak of the 1968 recession. Labor unrest has abated.

New Zealand's exports to the United States rose 11.5 percent in 1971 over 1970, while imports from the United States dropped 14 percent. New Zealand's favorable bilateral balance on current account with the United States was by far its biggest surplus with any country.

The decline in imports from the United States can be largely attributed to temporary factors such as the U.S. dock strikes and the investment slump in New Zealand, which curtailed imports of U.S. machinery and equipment. Also, the 1971 figures do not reflect payments for recent Government purchases of U.S. jet aircraft and diesel electric locomotives. Preliminary figures for the first quarter of 1972 indicate that imports from the United States are picking up again.

New Zealand's second-biggest customer, the United States, took 18.4 percent of its exports in 1971, about the same share as in 1970. Meat exports to the United States, primarily beef, showed vigorous growth. (Because shipping was carefully planned, these exports were unaffected by the U.S. dock strikes.) There was more good news for New Zealand in the announcement that its 1972 allocation under the U.S. voluntary restraint program for beef imports would be increased by 7.2 percent. (The restrictions were later suspended completely, however.)

### U.S. share slipped

Because of the decline in U.S. exports to New Zealand, the U.S. share of the New Zealand market slipped—from 12.5 percent in 1970 to 10 percent in 1971. The slack was mostly taken up by the United Kingdom and Japan, which increased their shares by one percent each—to 44.8 percent and 8.5 percent respectively. But the United

States easily retained its position as New Zealand's third biggest supplier, after the United Kingdom and Australia.

The 1972-73 Import Licensing Schedule, effective July 1, generally increases license allocations to a modest 10 percent above 1971-72 levels. But bigger increases of 25 percent or more are allowed on a substantial number of items, and another group has been exempted from licensing control altogether. When the new exemptions are implemented, less than 30 percent of New Zealand's imports will be subject to licensing.

## Export opportunities

Export opportunities for American companies arise from the new schedule in several ways. Importers of goods for which entitlements have been substantially increased may seek new suppliers. Greater provision for "token licenses" and for new importers should increase interest in American sources. A liberal policy will be continued to meet requirements for capital equipment not made locally.

Finally, the newly exempted items include a number of interest to U.S. exporters. Among these are photocopying apparatus, rubber tires of sizes not made in New Zealand, air compressors, escalators, plastic molding presses, machinery for repairing and making footwear, machinery for processing tobacco, machinery for aerating beverages, bottle-washing machines, nylon in powder and bulk form, and fresh fruit.

The new Import Licensing Schedule was greeted with renewed complaints from manufacturers who fear their domestic markets will be lost to cheap imports. With support from the labor movement, they claim that import liberalization over the past year has contributed to the business recession and unemployment. In the face of strong protectionist resistance, the Government is making haste slowly with its policy of replacing remaining import licensing restrictions with tariff protection within the next five years.

The Tariff and Development Board has just begun hearings on a list of several hundred items proposed for delicensing. What levels of tariff protection the Board will consider adequate is not yet clear, and the hearings are likely to be protracted. The Opposition Labour Party has promised that, if it wins the general election next November, it will halt the dismantling of import licensing.

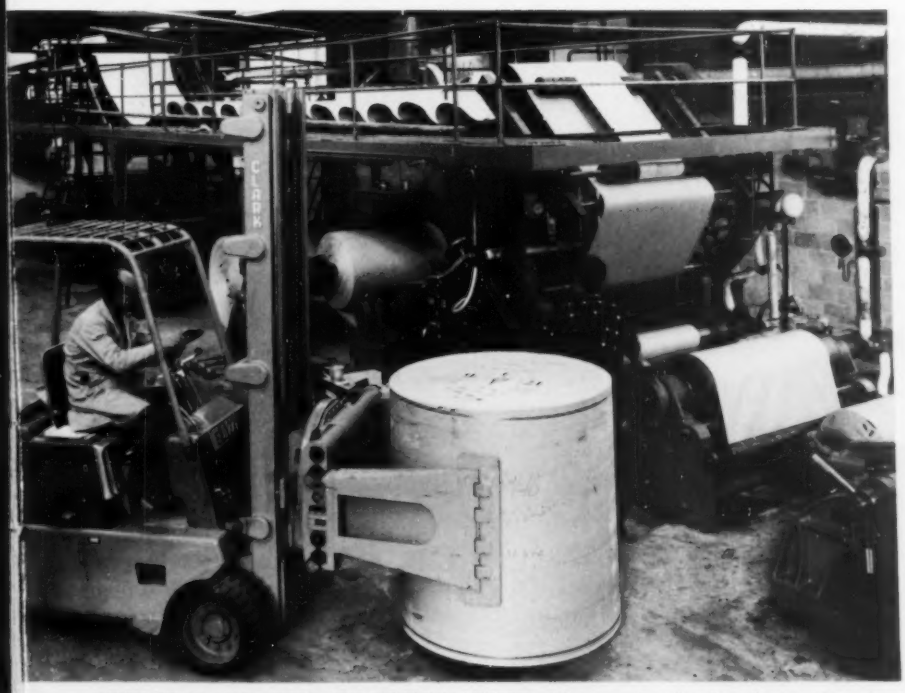
## Products with good potential

New Zealand should continue to provide a good market for exports of U.S. raw materials and capital equipment, especially modern labor-saving devices and industrial machinery. Timber-working machinery and pollution control devices are examples of products with especially good potential. The expected business recovery should bring renewed investment in capital equipment and more orders for raw materials and capital equipment and machinery from the United States.

The realignment of exchange rates earlier this year (the New Zealand dollar retained its parity with gold and sterling) should help to make U.S. goods more price-competitive in the New Zealand market. Further enhancing U.S. export prospects, three New Zealand financial institutions have recently announced that they will participate in the U.S. Export-Import Bank's Cooperative Financing Facility program.

Steady diversification of the economy is also creating investment opportunities. Considerable investment is now taking place in tourist hotels. Other promising fields for U.S. investment exist in the processing of New Zealand raw materials, such as timber and hides and skins.

The investment picture has been brightened by the recent arrival in New Zealand of five U.S. banks in partnership with New Zealand financial institutions, to assist in raising capital for investment projects.



**NEW ZEALAND WILL BE BUYING MORE**—*The country is already an important customer for equipment such as this American lift truck, and demand should rise.*

# Hong Kong's Growth To Be Modest Until Its Export Markets Pick Up

Hong Kong can probably look forward to reasonable economic growth for the remainder of 1972, according to the American Consulate there.

Hong Kong's export growth declined to 11.4 percent in 1971, from a high of 25 percent in 1969. It dropped further to 9.5 percent in the first five months of 1972. On the other hand, the terms of trade shifted slightly to Hong Kong's advantage during the year and construction, banking, and tourism are at record levels of activity.

Registered employment, after hitting a peak in the third quarter of 1971, has dropped slightly, yet listed industrial vacancies are at an alltime high. Wage increases have slackened since mid-1971 but other business costs, especially rents, are continuing to soar. The stock market is climbing at a record rate.

In short, the various sectors of the economy, with the exception of wigs, are faring from well to very well. If there is no general boom, neither is there stagnation.

Hong Kong's prosperity is chiefly dependent upon its markets. The Financial Secretary, in reporting on the state of the economy, said that a real pickup in demand in the United States and Europe should not be anticipated before mid-1973. Most local observers agree with this estimate and expect only modest export growth until then.

Hong Kong's principal worry is the growth of protectionist sentiment in its markets. In a recent article, the Governor pointed out that incomes in those countries restricting Hong Kong exports are considerably higher than in Hong Kong. He appealed to the good sense of Hong Kong's trading partners to head off protectionist measures.

Barring such developments, or disruptive monetary swings, Hong Kong can look forward to growth in the range of 8-10 percent for the remainder of 1972. The relative slack in the manufacturing sector will be compensated by construction, and commercial and financial undertakings. The year is seeing the weeding out of a number of smaller and less efficient firms. When demand for Hong Kong's exports again picks up, it will be ready to seize the opportunity.

U.S. exports to Hong Kong grew by 11.6 percent in 1971, but the U.S. share of the market fell from 13.2 percent to 12.5 percent. In the first five months of 1972, U.S. exports declined by 3.9 percent from the same period of 1971 and the U.S. market share fell to 11.9 percent. In view of the persistent and large deficit run by the United States in its trade with Hong Kong, these figures are not reassuring.

## U.S. may do better

Several factors have been invoked to explain the rather disappointing performance of U.S. exports since the dollar was devalued in December but the most plausible is that U.S. price controls have not applied to exports which have tended to remain at their pre-devaluation level or even to rise in terms of local prices. Another factor is that Hong Kong must export in order to import and export growth is expected to be modest in 1972. A shift in either of these factors could improve U.S. export prospects later in the year.

U.S. exports that have increased in 1972 are electronic machinery and components, fruits and vegetables, tobacco products, transport equipment, optical equipment, and miscellaneous chemical products. Although capital goods imports are not growing they remain at a fairly high level and offer opportunities for U.S. exporters; these should receive added impetus from Hong Kong's small business loan guaranty program.

The construction boom remains unabated and offers a good market for construction supplies and equipment, hotel supplies, and materials handling equipment. A recent U.S. Cotton Mission predicted a good crop in the coming year, news that was warmly received by local buyers.

HONG KONG WAITS FOR ANOTHER BOOM—*Hong Kong's prosperity is dependent upon its markets, and growth should soar again when foreign demand recovers.*

By the time this report is published, the Hong Kong Government will have chosen the contractor for the 40 million gallon desalting plant. An even larger project, however, is on the horizon. In June, the Government announced approval in principle to construct an underground mass transit system at an estimated cost of over $1 billion. Throughout the rest of 1972, the Government will be exploring financing possibilities. Assuming that acceptable financing is arranged, final specifications will be drawn up on a priority basis next year.

Hong Kong actively seeks foreign investment, particularly high technology manufacturing operations. These, it is hoped, will spearhead a general upgrading of production processes. Foreign manufacturers already account for over 12 percent of the Colony's domestic exports.

The Government has an active information program for potential investors but it offers no special tax incentives, believing that the Colony's facilities, low tax rates, and climate of stability offer genuine economic attractions to foreign investors. This contention was recently borne out by a Business Asia survey of multinational firms which concluded that Hong Kong and Singapore are the most desirable places in Asia for establishing regional headquarters.

There are now 500 U.S. firms in Hong Kong, a net increase of 15 since January 1971. Total movement in and out of the Colony involved over 50 companies, with those entering tending to be more sizable than those leaving. U.S. investment in the Colony is estimated to exceed $470 million. Most U.S. companies are regional offices responsible for sales and administration in the Far East, but over 100 are engaged in manufacturing.

Despite rising costs and a tight labor supply, Hong Kong still offers economic advantages and a cordial business climate for U.S. firms.

# Norwegians Optimistic Despite Lull; Offshore Activity Enlarges Market

Economic growth in Norway has slowed since early 1971, but the level of activity remains high in most sectors of the economy and unemployment is still very low. Prospects for the near future are good according to the U.S. Embassy in Oslo.

Although economic indicators available show few signs of an imminent upswing, a sense of optimism seems to prevail in business circles and among government planners. The current economic lull is largely a result of falling demand from abroad for some of Norway's traditional export products, notably pulp and paper and metals. Since demand for these is exceptionally sensitive to changes in business cycles, the current strengthening of economic activity among Norway's major trading partners, including the United States, is expected to result in an early rise in foreign demand.

Business optimism may, however, also reflect prospects in the longer run, that is, business opportunities within an enlarged EEC and in connection with Norway's emergence as an oil producing nation.

## Increasing interest in oil

International oil firms are becoming increasingly interested in the Norwegian part of the North Sea: between 60 and 80 of them have voiced interest in applying for the new allocation of blocks this fall.

Three fields of major commercial value have now been found in the Norwegian part of the North Sea. In addition to the Ekofisk field already in production for about a year, the Frigg Field—two thirds of which is situated on the Norwegian side—has been established as one of the world's major offshore gas fields. A new oil field with a reported potential per hole production capacity comparable to that of the rich Ekofisk Field was found this spring. Domestic investors have been particularly lucky in the North Sea oil-gas game in that there is Norwegian participation ranging from 7 percent (Ekofisk) to 37.5 percent (Frigg) in all the three above-mentioned deposits of hydrocarbons.

The outline of the future Norwegian oil policy can now be seen. A Storting (Parliament) Industry Committee has voted for the establishment of an oil directorate and a state oil company. The oil directorate will be located in Stavanger, which is already established as Norway's offshore oil center. The state oil company will be authorized to take part in all phases of oil exploration, production and marketing, with the possible exception of retail marketing. The state oil company will also take care of the Norwegian government's interests in regard to other gas oil concessionaires.

The Government has stated its aims in obtaining oil production participation rights on the basis of carried interests in every production right granted. State participation has so far been negotiated for the exploitation of the Frigg gas field and with the owners of a total of 26 blocks. The last such settlement resulted in a 40 percent carried interest for the Norwegian Government, but this percentage could well be increased in later settlements, according to a high government official.

The government's oil policy is one of a cautious step by step design aimed at securing maximum long-term benefits for Norway. Prime Minister Trygve Bratteli said in a press conference recently that exploitation rights would be granted for only a relatively lim-

NORWAY'S 'OIL CAPITAL'—*Stavanger, above, is headquarters for oil exploration in Norwegian sector of the North Sea. Some 50 oil companies are based there.*

ited number of blocks and primarily blocks in the area between the 59th and 62nd parallel.

## Steadily increasing market

Clearly, the continuing developments in offshore oil and gas promise a steadily increasing market for exploration and drilling equipment and related ancillary goods and services. Norwegian investments in oil activities on the Continental Shelf this year—excluding any possible pipeline construction — will reach $230 million according to government estimates, compared to some $90 million last year. Of that figure, imports of goods and services are expected to reach the $150 million level. The U.S. Embassy in Oslo expects a steady increase in these amounts, as the pace of offshore activity quickens.

Norwegian industry, itself, will play an increasingly large role as a supplier to the oil companies. This is indicated, for example, by the fact that Norway reportedly is now ranked as the world's second largest supplier of offshore rigs (in terms of orders booked), after the United States, but ahead of France, Singapore, Spain, Japan, and Canada. Norway's Aker Group, with four semi-submersible rigs on order, is reportedly number three in the world (following two American yards) in orders booked.

The offshore oil industry as a whole will represent one of the most attractive market potentials in Norway over the coming decade. It is a market in which American industry probably has a considerable technological edge, but it is evident that the extent of offshore oil and gas activity in Norway is still not fully appreciated in the United States. American suppliers who are not yet in the market should act quickly to avoid being frozen out by foreign competition for sales.

All segments of Norwegian society are becoming more and more seriously concerned about the problem of pollution; this is reflected, for example, in the recent creation of a Ministry for the Environment. There are obvious commercial implications: The Norwegian Federation of Industries has recently estimated that the current capital investment that must be made by industry for pollution control will amount to $225 million or more. In addition to this industrial investment, large sums will have to be spent by the public sector for municipal waste treatment and the like.

This should offer a promising market opportunity; and a good opportunity for market testing is offered by the planned Pollution Control Equipment show to be held at the U.S. Trade Center in Stockholm, Dec. 4-9. This show will be heavily promoted in Norway, as well as in the other Nordic countries.

The attractive potential of the Norwegian maritime market has stimulated the Department of Commerce to participate in the Norwegian maritime exhibition, NORSHIPPING, to be held in Oslo May 9-15, 1973. Preliminary plans call for a U.S. Exhibition comprising some 35 individual exhibitors. Firms interested in participating — especially new-to-market suppliers of ships gear; sophisticated navigation equipment; advanced cargo handling equipment; labor-saving equipment for the shipbuilding industry; components for specialized vessels, such as cryogenics systems for LNG carriers; and anti-pollution equipment for the maritime industry—should contact the Department's Office of International Trade Promotion. A general description of the market is contained in the May 1, 1972 issue of *Commerce Today*.

## Appoint a representative

American suppliers can probably best take advantage of the expected strengthening of consumer demand by appointing a local representative to cover the market on their behalf. Norway's small population —3.9 million—may be too small to justify sales trips from the United States, and department store buyers have indicated to the Embassy their reluctance to order from catalog offerings and their preference for doing business with Norwegian agents and wholesalers.

It is clear that American consumer goods can do well in this market if handled by a competent local agent, with adequate promotional support from the principal. Despite a 25 percent tariff barrier, for example, a well-known U.S. brand of jeans has increased its sales in Norway from $210,000 to $3 million in three years, which proves that it can be done.

# Dominican Economy Back To Normal As Business Adjusts To Reform Acts

The Dominican economy is on its way to its fourth consecutive year of above average economic growth. The sharp rise in world market sugar prices in late 1971 improved 1972 prospects for the economy, but business confidence was set back somewhat by the negative reaction to tax and agrarian reform measures enacted by the government in early March. The business sector's startled reaction to the reform measures caused a several-month slackening in the pace of economic activity, reports the U.S. Embassy in Santo Domingo.

## Activity picks up

However, activity appears to be regaining its previous tempo as businessmen conclude that the reforms will not affect their interests adversely and that although the rules of the game are somewhat changed, the game itself continues to grow larger and more rewarding and they cannot afford not to play.

Given the anticipated continued high levels of economic activity and the additional foreign exchange reserves available from increased sugar exports at higher prices, sales opportunities in the Dominican Republic for U.S. exporters should remain good. The revaluation of European and Japanese currencies with respect to the dollar-pegged Dominican peso should enable more U.S. products to compete successfully in this market.

The new reformist posture being adopted by the Dominican Government requires U.S. businessmen operating in the country, or hoping to do so, to keep on top of the changing local situation. There is no cause for alarm, but every reason to keep alert to ensure that operations are in tune with the changing Dominican scene.

Investment opportunities are greatest at this time in the field of tourism. The Dominican Government is seeking to dispose of its three 100- to 250-room Santo Domingo hotels. The government will also be looking for investors to develop the tourist zones identified by World Bank and Inter-American Development Bank studies. Private groups are seeking financing for development of beach properties or for investors to purchase and develop subdivisions of the properties.

The import market is growing by about $50 million a year, and sales opportunities appear to be greatest in the capital goods and raw materials categories, particularly in the construction, food processing, tourism and agricultural equipment sectors.

The movement toward import replacement industrialization which swept through most Latin American countries some years ago is only now affecting the Dominican Republic in a major way. The Government seems to have profited from some of the errors which these other countries committed. Rather than welcoming any form of local manufacturing which would produce another product having a "made in the Dominican Republic" label, Dominican authorities are withholding authorization of tax benefits from proposed industries which will save little if any foreign exchange and which will have relatively little value added by the local manufacturing or use of local raw materials. The Government is encountering opposition to these policies, but is expected to stand by them.

In spite of this attitude on the part of the Dominican authorities, new industrial enterprises continue to spring up with great rapidity. At the present time about 15 factories, mostly of relatively small size, are under construction in the Herrera Industrial Park on the outskirts of Santo Domingo. Other industrial enterprises are under construction elsewhere in the country.

An important factor contributing to the economy's current forward thrust is that in the last months of 1971 and thus far in 1972, the Dominican economy has been participating much more fully in international capital markets than at any time in recent decades. Sizable dollar loans have been made available from foreign commercial banks to Dominican private firms and government entities both directly and through local commercial banks. This type of borrowing adds a new dimension to the Dominican economy.

## Source of financing

The U.S. Export-Import Bank, which has not been very active in the Dominican economy for several years, is also likely to become an important source of financing in the next year or so. There are projects totaling over $40 million which Dominican public and private sector borrowers have either presented or are expected to present to the Eximbank for financing. Eximbank financing is being sought for projects involving jet aircraft, cement production, banana processing, mining, telecommunications improvements and sugar mill modernization.

The balance of payments pressures which were mounting toward the end of 1971 were eased by the sharp rise in sugar prices and by the inflow of commercial bank loans from abroad. Nevertheless, balance of payments pressures will remain the Achilles' heel of the Dominican Republic's economy.

This very strong element of demand affecting imports has been a key factor on the Dominican economic scene for more than a year, and has been responsible for a substantial rise in prices in terms of the economy's past price performance. The rate of inflation in 1971 was estimated at over 6 percent, and it appears likely that the rate will be at least 8 percent in 1972.

## World Trade Actions

# Canada Institutes Special Exporters' Declaration

**Canada:** Effective September 1, Canada will require that all shipments to Canada valued at $10,000 or more must be documented by a special exporters' declaration. One copy must be completed by the exporter for each shipment in this value bracket, attached to the original Canadian Commercial Invoice Form MA, and forwarded to the Canadian importer.

The form contains the following five items and concludes with a certification by the exporter:

- Is your company or any other company entitled to a reduction, deferral, or exemption from corporate income taxes in respect of income earned on exports that would be payable if the goods had been sold for home consumption?
- If the answer to question 1 is "Yes," please indicate whether this has resulted in changes in the transfer or selling prices of any or all items included in this shipment.
- If transfer or selling prices have changed, please specify each of the items involved, and by how much.
- If the answer to question 1 is "Yes" please specify the party or parties entitled to the benefit.
- Specify the name and address of the producer of the goods contained in this shipment.

The bottom of the form contains four notes to the exporter. The first limits the requirement to shipments valued at $10,000 or more. The second requires that the declaration be attached to the original copy of the Canadian Commercial Invoice Form MA. The third specifies that question 1 refers only to "Shipment covered by Customs Invoice to which the Special Exporters Declaration relates" and that "any other company" relates to the company involved in the production or distribution of goods contained in the shipment. The last note refers to questions 2 and 3 and states that the pricing changes are those since July 28, 1972 and that additional pages should be attached if needed.

The declaration forms will be available from Canadian Consular offices in the following cities: Washington, New York, Boston, Buffalo, Chicago, Cleveland, Dallas, Detroit, Los Angeles, Minneapolis, New Orleans, Philadelphia, San Francisco, and Seattle. In addition, Canadian importers may, on behalf of their U.S. suppliers, get these forms from their local Canadian Collector of Customs. Furthermore, the forms may be obtained from those U.S. Department of Commerce Field Offices in cities where there are no Canadian Consular offices. For a list of the Field Offices see the inside back cover of this issue.

The United States DISC program for exporters, as well as export assistance schemes of Japan, Australia, South Africa and Brazil, prompted Canada's institution of the new Customs surveillance system. In its press release, the Canadian Government stated that the additional information required under the new system is designed to ensure that the trade practices of exporters to Canada are consistent with Canadian legislation.

Accordingly, the U.S. Government does not anticipate that the new declaration will interfere with the normal flow of U.S. exports to Canada. The U.S. Department of Commerce would be interested in hearing from exporters if any difficulties are created by this new reporting requirement.

**Finland:** Effective July 17, the Finnish Government eased installment credit terms for a number of items. The down payment was reduced to 20 percent from 40 percent, and the payment period extended from 12 to 18 months for the following items: new motorcycles, TV sets, record players, loudspeakers, tape and wire recorders, refrigerators, freezers, washing machines, dishwashers, sewing machines and vacuum cleaners. For new trucks and delivery vans, the minimum down payment was reduced from 40 percent to 30 percent, but the maximum payment periods remain unchanged at 18 months and 24 months, respectively.

Installment purchase terms for large special tractors and trucks as well as for passenger cars remain the same.

**Austria:** The validity of all available unilateral tariff reductions and temporary exemptions from border tax have been extended until Dec. 30 (*Commerce Today*, Feb. 21, Page 54). These moves are a part of the government's continuing effort to dampen inflation. Changes of possible interest to U.S. exporters include the following: (1) Whole eggs and egg yolk, dried (TN 04.05-C) intended for the manufacture of egg-based alimentary paste may, subject to permit, be imported free of duty and border tax; (2) Customs duties on gasoline engines for automobiles over 30 h.p. (DIN) imported before Dec. 30 have been reduced to 10 percent; (3) Upon application by the importer, air heaters in the form of hot air guns (TN 85.12) can be imported at 1/3 of the normal tariff rate if there is no domestic production, or 1/2 if domestic production is too low.

**Oman:** The Sultan of Oman recently issued a decree stipulating the conditions for foreign investment in Oman.

Every business must have a license issued by the Minister of Economy, with the advice of a

Special Committee for the Investment of Foreign Capital. Foreign business enterprises must have Omani partners or shareholders; the amount of local participation required varies from 35 percent to 66⅔ percent depending on the type of business or enterprise. Foreign investment in economic development projects enjoys a 5-year income tax holiday and the same protection and encouragement as domestic capital.

The Sultanate of Oman lies on the southeastern corner of the Arabian Peninsula along the Gulf of Oman and the Arabian Sea. It is an undeveloped country, in need of a wide range of facilities, including roads; irrigation for agriculture and water supplies for towns; schools; hospitals and clinics.

An English translation of the Decree is available from the Near East-South Asia Division, OICR, BIC-896, U.S. Department of Commerce, Washington, D.C. 20230.

**South Africa:** The import licensing controls that went into effect last November will be relaxed on a number of commodiities due to significant improvement in South Africa's balance-of-payments situation. With a few exceptions (which have not yet been named), products that were exempt from licensing requirements prior to November will again appear on the free list.

Commodities that were automatically licensed before November will be reinstated to that status, with certain exceptions: pharmaceuticals, fungicides, pesticides, insecticides, textile piece goods for resale by merchants, paper and paper board, wines and spirits, general merchandise, and one unnamed category. Pharmaceuticals, fungicides, pesticides, insecticides, paper and paper board may be imported under licenses that will allow merchants and manufacturers to maintain their stocks at four months' normal requirements. A third issue of import allocations for textile piece goods for resale by merchants will be equal to 10 percent of 1969 imports, bringing total allocations for the year so far to 45 percent of the 1969 level. New issues of allocations will be granted for whisky at 30 percent of 1969 imports and for wines and other spirits at 10 percent of the 1969 level. An allocation issue of 20 percent will be made for general merchandise, bringing the total to 50 percent of 1969 imports. The pre-November list of commodities requiring specific import permits will be retained "in large measure."

The South African announcement of the changes in license requirements emphasizes that import licenses would not be used as a protective measure, but that South Africa reserves the right to protect its industries through adjustment of tariff levels. The Government has invited South African industries to submit proposals for tariff changes, and the Board of Trade is apparently reviewing a large number of requests for higher tariffs.

**Pakistan:** The Government has announced new import-export regulations for the period May 15, 1972-June 30, 1973, along with its May 11 devaluation of the Rupee (Rs.) from Rs.4.76 to Rs.11 equals $1. The previous import system of quota licensing, foreign exchange rationing, and multiple exchange rates has been abolished to allow market forces at the new exchange rate to regulate imports. Licenses are still required but are not subject to quantitative restrictions.

Under the new system, goods will be freely importable under two lists—the free (untied) list or the tied list. The free list consists of 327 items importable either from worldwide sources against Pakistan's own foreign exchange or under aid credits and barter; the tied list comprises 23 essential items importable under barter or aid credit only. Imports of items not on these lists are banned.

The state trading organization, Trading Corp. of Pakistan, will import all required (except when imported against U.S. AID loans) pig iron, steel billets, steel strips, sulphur, coal and coke, mercury, newsprint, wood pulp, yarn and thread of man-made fiber, sugar, copper rods and ingots, and aluminum, lead, and zinc ingots. Only public interests will be permitted to import fertilizers, electrical transmission and distribution equipment, rail and track materials, and coal.

The policy for imports of drugs, medicines, their raw materials and packings will be announced later.

Changes in customs duties will be forthcoming to supplement the new import system. Duties will be reduced on the essential tied list items previously imported at the more favorable official exchange rate in order to hold down landed costs of these items and encourage full use of foreign assistance. On the other hand, customs duties will be increased on non-essential goods previously imported at the higher bonus exchange rate.

For specific information on Pakistan's import policy, write to Near East-South Asia Division, BIC-896, U.S. Department of Commerce, Washington, D. C. 20230. When requesting information, please include the Brussels Tariff Nomenclature, the U.S. Schedule B export commodity number or a full product description.

**Greece:** Ministerial Decision No. 256700/4200 of May 19 extends restrictions on the importation and unrestricted use of certain insecticides to include all types of preparations (agricultural, household, and veterinary), of organic chlorinated insecticides, hexachlorcycloexane (H.C.H.), toxaphene, and strobane. Government services or organizations may use H.C.H. in controlled situations such as for locust control, forest nursery, soil insect control, and similar applications, under the supervision and responsibility of these services and organizations. Also suspended until further notice was the importation of the pesticides lindane endosulfan and methoxychlor.

**A Handbook on Financing U.S. Exports. Published by the Machinery and Allied Products Institute and Council for Technological Advancement. 160 pp. $7.**

As competition for export sales grows in world markets, the importance of export financing increases. To improve—or even retain—his present competitive position, the U.S. exporter must be able to offer financing promptly and on reasonable terms. Fortunately, according to this book, the availability of such financing has improved in the last few years.

Designed to serve as a useful guide and reference work for the company engaged and experienced—or about to become engaged—in foreign operations, this publication gives detailed coverage to new programs and procedures implemented recently by the U.S. Export-Import Bank, commercial banks and other organizations, and discusses their standard requirements in extending export credit assistance. Additionally, the book is designed to provide the reader with insights into government policies affecting the financing of U.S. exports.

**Write:** Machinery and Allied Products Institute, 1200 18th St. N.W., Washington, D.C. 20036.

**Statement of the Laws of Uruguay in Matters Affecting Business. By Horacio Cassinelli Munoz. Published by the Organization of American States. $5.**

The fifth edition of this publication is designed to provide businessmen, lawyers and other interested parties with a summary of basic legislation in force in Uruguay. It contains a summary of pertinent constitutional, statutory, and regulatory provisions through Jan. 15, 1971. Among other topics, it discusses rights and duties of foreigners, foreign investment, commercial companies, contracts and obligations, and property rights.

**Write:** Organization of American States, Sales and Promotion Division, 19th & Constitution Ave., NW., Washington, D.C. 20006.

**Strategies for Penetrating Markets of Eastern Europe and Russia. Published by Pan American World Airways, Inc. 12 pp. Free.**

Guidelines for successful trade negotiations with the countries of Eastern Europe and the Soviet Union are offered in this pamphlet, which is especially written for the medium and small-scale businessman who needs basic information about exporting his goods to this area. Data provided by the pamphlet includes ways to determine the demand for products and services, primary sources of information on trade with Eastern Europe and the Soviet Union, and how to negotiate trade agreements.

**Write:** Pan American World Airways, P.O. Box 2212, Boston, Mass. 02107.

**American-Hellenic Chamber of Commerce 1972 Business Directory. Published by the American-Hellenic Chamber of Commerce. $10 surface mail, $13 air mail.**

This directory contains an alphabetical and classified listing of all its members together with a description of their activities; a comprehensive listing of all American firms represented in Greece together with the name of their respective Greek agents; a listing of all American companies, subsidiaries and affiliates established and operating in Greece; and useful data about Greece for the foreign businessman, such as market data, import-export statistics, marketable products, how to establish a business in Greece and a summary of Greek foreign trade regulations.

**Write:** American-Hellenic Chamber of Commerce, 171 Valaortou St., Athens 134, Greece.

## Calendar For World Traders

**Aug. 24—Chicago**—Paul W. Aylward, Jr., Economic/Commercial Officer, Montreal, available for consultation, Field Office.

**Aug. 25 — Dallas** — Translations: The Importance of Good Communications, Hilton Inn. Sponsor: Dallas Field Office.

**Sept. 5—New York**—Foreign Credit Interchange Bureau roundtable conference, Summit Hotel, noon.

**Sept. 5-15—Chicago**—International Machine Tool Show, McCormick Place and International Amphitheater.

**Sept. 7 — Cleveland** — Cleveland World Trade Assn. monthly luncheon, Mid-Day Club.

**Sept. 13 — New York** — Foreign Credit Interchange Bureau Export Credit Group dinner meeting, Advertising Club, 4 p.m.

**Sept. 14 — New York** — Overseas Automotive Club luncheon and meeting, Summit Hotel, noon.

**Sept. 14-Oct. 19 — Cleveland** — Weekly series of international trade workshops sponsored by Cleveland World Trade Assn., Union Commerce Building.

**Sept. 15-16 — Chicago** — Business Opportunity Fair for Minority Businessmen, Conrad Hilton.

**Sept. 21 — Cleveland**—CSU-Cleveland World Trade Assn. DISC Seminar, Statler-Hilton Hotel.

**Sept. 24-28—Washington, D.C.**—Third International Conference on Liquefied Natural Gas, Wash. Hilton. U.S. sponsor: Institute of Gas Technology (Chicago).

**Sept. 25 — Philadelphia**—First of twenty-six weekly sessions of Export-Import traffic course, Academy of Advanced Traffic.

**Sept. 27—South Bend, Ind.**—Michiana World Trade Club. Subject: East-West Trade.

# Worldwide Business Services

*The specific business opportunities on these and following pages have been developed for U.S. traders by international specialists in the Department of Commerce and Foreign Service Officers in U.S. Embassies and Consulates around the world.*

## Licensing, Investment Abroad

**1011, 1090—NEW ZEALAND**—Financial and technical assistance by U.S. mining firms sought to develop reported major deposits of **magnetite and ilmenite with some vanadium.** Site is near Doubtful Sound in mountainous southwest. Technical details available. Joseph Nathan and Co., Ltd., P.O. Box 1792, Wellington 1. WTD. P-72447.

**1473—MOROCCO**—A Moroccan Government organization will extend up to 50 percent equity to U.S. joint venture partner in development of **fluorite deposit** at Jebel Tirremi in northeastern Morocco. To obtain copy of French language study and further information, interested firms should write: Bureau de Recherche et de Participations Miniers (BRPM), 27-29 Charia, Moulay Hassan, Rabat. P-72452.

**1500—AUSTRIA**—Major Austrian construction firm seeks collaboration with U.S. engineering and construction company for bidding on UN City project in Vienna. Foreign organizations are required to bid in cooperation with Austrian firms for this **$152 million office and conference building project.** Partnership also sought with land development group for construction of workers' housing. Ing. Franz Ambros, Manager and Partner, Strassgschwantner & ambros, Kahlenbergerstrasse 2b, A-1195, Vienna XIX, Austria. WTD. P-72467.

**2819—BRAZIL**—State and Federal Government of Rio Grande do Sul are looking for a foreign group to build an **ammonia factory** in the city of Rio Grande. Capacity of 1,000 tons per day, to be used by local fertilizer plants. Roberto Pires Pacheco, Secretary of Industry & Commerce, Rua Caldas Junior, 120- 15th Floor, Porto Alegre, Rio Grande do Sul. (Tel. 25-5044.) P-72469.

**2834 — SWITZERLAND** — Manufacturing rights for **quality cosmetics and nonprescription pharmaceuticals.** Product interests include creams, lotions and similar items for skin care, make up specialties; and vitamin combinations, nutritive preparations and simple pain relief remedies. Firm currently makes cosmetic specialties, pharmaceuticals. Operates automated manufacturing facilities, sells to drug and specialty stores. T. Tettamanti, president, G. Tettamanti & Co., Stampgenbachstr. 75, 8035 Zurich. WTD. P-72456.

**3069 — POLAND** — Major rubber goods producer for automotive industry willing to purchase for hard currency licenses for machinery, manufacturing processes, full production lines and research equipment connected with: **Zimmer rings; molded rubber goods for automotive industry; rubber-metal goods for dynamic operations in which material is compressed and returns to original shape; finishing operations for rubber piston rings used in automotive braking systems; windshield wiper blades;** and **finishing process for exterior surface of rubber products in general.** Firm is anxious to complete purchase of licenses as soon as possible. Interested U.S. firms should write: American Embassy, Aleje Ujazdowskie 29/31, Warsaw. Attn: Commercial Officer. P-72461.

**3357—KUWAIT**—Joint venture proposed for construction of plant to manufacture **electrical cables and wire** at annual production level of 10,000 to 12,000 tons. Firm has been awarded government license to establish the plant. Initial capital investment estimated at around $6 million. U.S. participation subject to negotiation. Firm is a subsidiary of Sayid Rajab al-Rifai (WTD). Mr. A. M. Arab, General Manager, Kuwait Overseas Agencies Center, P.O. Box 301, Kuwait. P-72453.

**3390 — UNITED KINGDOM** — Leading producer of railroad rolling stock seeks licensing or contract manufacturing arrangement for diversification into manufacture of general engineering products. Such products might call for firm's expertise and experience in handling **weldments in structural steel and mild steel plate and facilities for forging, heat treatment and manufacture of laminated steel springs.** Firm established in 1906, employs 298 and reports 1971 sales of around $2.6 million. Powell Duffryn Wagon Co., Ltd., Cambrian Works, Maindy, Cardiff, Wales. Attn: W. G. Munday, Managing Director. P-72455.

**3400—BELGIUM**—Established manufacturer of **boilers for central heating systems** is seeking complementary production lines. Household goods, car accessories and equipment for gardening can be envisaged. Any form of collaboration will be considered. Employs 409; capital more than $3 million. Xavier Van Migem, Vice Consul, Belgian Consulate General, Industrial Sec., 50 Rockefeller Plaza, New York, N.Y. 10020. P-72470.

**3433, 3494—UNITED KINGDOM**—Major producer, and distributor in field of liquid petroleum and ammonia gases interested in discussing licensing, joint venture, technical know-how and trading arrangements involving new products and services. Manufactured products include **gas appliances, valves, regulators, heating equipment and welding products and accessories.** Services include distribution of LPG in bulk and in cylinders, operation of transport system for gases, chemicals and bulk liquids employing over 1,200 pieces of automotive equipment, and marketing of anhydrous ammonia as a fertilizer to farmers for direct injection into the soil. Calor Group Ltd., Calor House, Windsor Rd., Slough SL1 2EQ, Buckinghamshire, England. Attn: T. Cotton, Director of Corporate Planning. WTD. P-72449.

**3446—VENEZUELA**—Joint venture or similar arrangement with U.S. company familiar with latest developments in functional design and fabricating techniques of **lamp posts for street and highway lighting** by firm experienced in the industry. Established in 1953, firm is reported a major producer in the field, employs 24 and is seeking expansion. Industria Nacional Electrica C.A. (INELCA), Apartado 61287, Caracas. P-72450. Correspondence, in Spanish, should be addressed to Jose S. Rojas Romero, General Administrator.

**3494 — UNITED KINGDOM** — Licensing or joint venture arrangement sought by producer of valves and fittings for the **hydraulic and pneumatic industries** to manufacture products for these industries including devices incorporating electronic elements. Firm established in 1936, has annual sales around $12.5 million and employs 850 plus 25 salesmen operating in U.K., EFTA, EEC and Australia. Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-72454.

**3559—JAPAN**—License to manufacture and market **automated window washing equipment** for buildings. Firm presently produces a wide range of equipment, including bulldozers. cranes, molds, turbine blades, alloy castings and precision forged products. Is affiliate of Sumitomo Shipbuilding and Machinery Co. Nittoku Metal Industry Co., Ltd., Tokyo Office, 4-9 Nishi Shinjuku, 1-chome, Shinjuku-ku, Tokyo. WTD. P-72457.

*Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.*

*Background information on opportunities abroad and assistance on overseas investments are available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20203."P" numbers should be used when responding to specific proposals.*

*WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.*

3559 —SWITZERLAND— Seeks licenses for **equipment and machinery for the treatment of industrial waste water.** Interested in entire systems for application by the textile, paper, food and chemical industries, including know-how, technical collaboration, new processes. Specializes in domestic sewage treatment equipment. Also manufactures concrete pre-stressing systems and machinery for casting industry. Employs 160; annual sales nearly $3 million. Mr. Leutenegger, Mecanna SA, 8716 Schmerikon, Switzerland. WTD. P-72471.

3559, 3585 — UNITED KINGDOM — Licenses to manufacture **air pollution control equipment, compressed air dryers, air conditioners and related products.** Presently makes industrial and marine dehumidifying equipment. Can produce light machinery from steel and aluminum. Cargocaire Ltd., 2 Glebe Road, Huntingdon PE18 7DU, England. WTD. P-72446.

3562 — JAPAN — Leading manufacturer of **ball and roller bearings** seeks latest manufacturing technology. Presently incorporates most advanced concepts in bearings. Wants to broaden line to include advanced, although not necessarily related, products. Also produces automotive and machine tools, textile machines, gears, clutches for mechanical power transmission equipment and components. Open to variety of forms of participation, including licenses, joint ventures. Established 1916; employs 7,000; annual sales $200 million. A. T. Kawaski, Manager, Foreign Operation Div., Nippon Seiko K.K., Yusen Bldg., 3-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo. WTD. P-72444.

3564—GERMANY—License to manufacture **dust collection equipment for industrial applications.** Firm presently produces industrial air control equipment. Well established in German market; maintains several branches. Employs 100. Franz Winterfeld GmbH. 12-20 Germaniastrasse, 1 Berlin 42. WTD. P-72448.

3662, 3674—FRANCE—Licenses sought by producer experienced in electronics industry to manufacture **electronic equipment for communications and for electronic consumer goods.** Current production of electronic equipment is for the telecommunications, EDP and aero-space industries and includes printed circuits, power control and measuring equipment, micro-modules, coaxial cable and automation equipment. Established in 1965, firm employs 50 and has annual sales around $700,000. Societe d'Equipements Electroniques, 58 Avenue Aristide Briand, 92—Montrouge, France. WTD. P-72459.

3662, 3811 —SWITZERLAND— Licenses sought by experienced firm for **solid state lasers of glass, rubies, yag, $CO_2$ gas lasers and TEA lasers.** Fields of application should be **metal surface treatment, welding, and drilling.** Licenses also are sought for **related electronic systems and items for measuring purposes.** Plans call for import of the laser optic and manufacture of the related power supply and auxiliary equipment, with adaptation of machines to specific needs of Swiss end users. Firm specializes in laser equipment for industrial applications and has developed own laser welding and metal-cutting machine used throughout Europe. Laser Techniques S.A., Muehleweg 13, 3294 Buren, Switz. Attn: Mr. Remund. WTD.P-72458.

3679—INDIA—Joint venture sought to establish plant in Free Trade Zone at Bombay for manufacture of **electronic components and sub-assemblies, including capacitors, connectors, printed circuit boards and computer peripherals.** Firm is member of business group producing diversified product line including foundry engineering products and industrial alcohol. Belvandi Private Ltd., Industrial Assurance Bldg., Churchgate, Bombay—20 BR. Write: U.S. Representative P. D. Dahanukar, 305 Memorial Drive, Cambridge, Mass. 02139. P-72451.

3999 — INDIA — Established firm seeks equity and technical know-how to manufacture **cigarette filter tips** using vicose rayon fibers. Initial planned capacity 400 million filter rods per annum. Raw materials available locally. Established in 1920, firm presently manufactures aluminum collapsible tubes and rigid containers; distributes iron and steel products. Lalit H. Mehta, Partner, C. Prabhudas & Co., 251 Sant Tukaram Rd., Iron Market, Carnac Bunder, Bombay 9. WTD. P-72468.

7011 — ETHIOPIA — Government tourism and hotel organization planning series of **new lodges and hotels on Addis-Ababa-Asmara corridor.** Desires collaboration with foreign firms for implementing these plans for facilities costing $15 million. A booklet summarizing these developments has just been released. Write: Ato Abdul Jelil Mohamed, General Manager, Ethiopian Tourism and Hotels Investment Corp., S.C. (ETHIC), P.O. Box 1263, Addis Ababa. P-72460.

7948—TUNISIA—Racing society seeks American equity participation in new **horse racing track complex** to be located near Sousse, a major tourism center. Estimated initial capitalization is $1 million, of which one-half is to be raised from local private investors. Complex includes race track with on-track parimutuel, 100-bed hotel, restaurant and snack bars. Hedi Saheb-Ettaba, Director General, Societe des Courses de Tunisie, Kassar-Said, Tunisia. P-72445.

## Licensing In U.S.

*For additional information on opportunities to manufacture foreign firm's products in the U.S., write Commerce's Office of International Investment, BIC-874, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2248), referring to the appropriate file number.*

AUSTRIA—A leading manufacturer of office supplies and stationery is interested in cross licensing with medium-sized U.S. manufacturers in the production of **self-adhesive tape.** The firm is offering its pressure sensitive vinyl tape used in packaging, which has had good sales in the U.S. The firm is seeking from U.S. firms technical tape, including pressure sensitive tapes, which it can market in Europe and elsewhere through its marketing organization. This company's products are protected by about 250 patents and more than 770 registered trademarks. **File 2239**

GERMANY—A manufacturer of coated carpet tiles is offering licenses and know-how for the U.S. production of **atactic polypropylene (APP) backing of carpet tiles.** The company claims they are cheaper than other types of carpet tiles, are slip-resistant and sufficiently elastic to adjust to all motions and stresses. The tiles will lie flat on the floor and do not require additional adhesives. **File 2240**

GERMANY—A small firm is offering a license and technical know-how for an **electrolytic dyeing process for aluminum.** Five different colors are possible, and dyeing time is one to eight minutes. **File 2241**

GERMANY—An inventor is interested in finding a U.S. licensee for his **non-electrical underwater-massage device for use in bathtubs.** He claims his massage equipment offered at the end price of about $47 (manufacturer's price: $21) compared to an end-price of about $254 for compressor-operated equipment with similar effects offered by a competing company. **File 2242**

GERMANY—A manufacturer of pumps and machinery for the beverage industries is offering **know-how for the production within two days of quality beers.** The firm claims space requirements are reduced to 30% of conventional installations, and operating costs are reduced 50%. **File 2243**

GERMANY—A firm is offering know-how for the production of low calorie bread with a high vitamin content (daily vitamin requirement in two slices, according to the firm). **File 2244**

GERMANY—A firm is seeking a U.S. licensee to produce its **patient monitoring systems, operation monitoring systems and electrotherapeutic apparatus for hospitals.** The firm claims its monitoring systems are technologically more advanced, mobile and compact than any comparable system on the European or American markets, but competitive. The company is interested in receiving inquiries from U.S. manufacturers of electronic medical apparatus with a nationwide marketing and service system. **File 2245**

GERMANY—A rapidly growing firm is seeking a U.S. licensee for production of **micronized polypropylene wax.** The wax does not require dissolving or melting, but can be incorporated into all solvent systems by means of a high speed stirrer. Additionally, it may be dispersed in any solvent to form a paste for use as a post additive. The firm reports that only minor quantities are required for use in printing inks, nitrocellulose, nitrocellulose combinations, two component polyurethanes and acid catalyzed types. **File 2246**

GERMANY—An aircraft manufacturer is seeking a U.S. licensee to produce its new **rotary piston system for combustion engines and pumps/compressors.** The company reports that patents have been granted only recently and that working models are available. It further reported that a number of significant European manufacturers have shown a strong interest in licensing arrangements. The reported advantages are: high compression ratio; stationary combustion chamber; and seals located in casing and not in piston. Its competitive product is in the Wankel engine. **File 2247**

NETHERLANDS—A firm is interested in cross-licensing—offering for production in the United States its patented **high build epoxy coal tar coatings for long term and heavy duty protection of concrete and steel structures, especially**

**underwater, such as shore drilling rigs, sluices and jetties. File 2099-R**

**SWITZERLAND**—The cookingware department of a manufacturer of home laundry and kitchen equipment and utensils is offering for production in the U.S. its line of **aluminum and stainless steel pressure cookers and its stainless steel casseroles/saucepans. File 2248**

**SWITZERLAND**—A highly specialized company is offering for manufacture in the U.S. its permanent and portable **antibacteriological water treatment equipment.** The portable equipment consists of a small pocket filtering device used to produce about one quart per minute of drinking water from any source. It is used principally by campers, military, and in emergency or tropical conditions in which potable water is not available. The company also offers a portable hand operated piston-type pump filter with a production of about three quarts per minute. It has a line of filters for permanent installation in buildings which do not have direct access to a communal water supply system. Filters are designed for use by the chemical industries and by bottlers, breweries, canning plants, ice-cream producers and other companies which require germ-free water; they are made of stainless steel and have outputs of up to 12 gallons per minute. The filters are increasingly being used on ships for the production of germ-free water. **File 2249**

**SWITZERLAND**—A pipe manufacturer is seeking a licensee or possibly a joint venture partner for production and distribution in the U.S. of its **sanitary pipes made of polyethylene and polypropylene.** The company has developed complete prefabricated systems for assembling waste pipework in the plant before installation at the site. It claims its pipe systems are labor- and cost-saving, can withstand heat up to about 235 degrees F., are corrosion resistant, and can be embedded in concrete or cement. Applications are in all kinds of construction. The company owns several patents for pipe welding, couplers and threading, and will assist U.S. licensee/partner with know-how in plastics processing and welding, and limited financial participation. **File 2250**

**SWITZERLAND** — A reputable Swiss manufacturer of flow measuring and control devices, control panels and electronic steering apparatus wants to license the manufacturing of their newly developed **measuring device for sewage treatment systems.** This device is reported to be the first flow measuring device which does not result in a loss of pressure; variation of the electrical resistance of the liquid does not affect the precision of the measurement. **File 2075-R**

## Egypt Desires Foodstuffs

El Nasr, an official trading organization of the Egyptian Government, specializing in the import of food commodities seeks agency agreements with U.S. suppliers of meat products, dairy products, grain mill products, miscellaneous food preparations and kindred products, and tobacco manufactures. Interested U.S. firms should write El Nasr Export & Import Co., Attn: Mustafa Rustafa Rushdy, Chairman, 28 Talaat Harb St., Cairo. Cable address: SHINTAM CAIRO. Telex: 2232 SHINTAM CAIRO.

# *UNDP Approves Long-Range Funding For 16 More Nations' Growth Plans*

The Governing Council of the United Nations Development Program has approved integrated country programs for an additional 16 nations, bringing the total to 35. These countries have been informed that, between 1972 to 1976, they can plan to receive about $250 million in UNDP assistance.

Under the new system, developing countries submit three-to-five year development programs to the UNDP Administrator for review and his recommendations on the amount of UNDP assistance that will be made available for its program period.

The Director's recommendation is usually in the form of Indicative Planning Figures (IPF's) for each country. These figures describe the Nature of the programming exercise, Relation of the program to the country's development plan, break down the country program by sectors and sub-sectors, outlining the planned utilization of UNDP funds for the program period, described special problems and needs of the country, and include the recommendation of the Administrator.

The Director of the UNDP submits the integrated country program and his recommendations to the Governing Council for their review and subsequent approval at one of their regularly scheduled meetings (usually January and June each year). Approval of these programs enables the requesting country to determine the amount of assistance it may expect from the UNDP. Upon approval of these programs, the Director of the UNDP can approve individual projects emerging from these programs upon receipt from the requesting country.

The integrated country programs are comprehensive reports and reflect the needs of the country. These programs consist of statements of overall development objectives and priorities; sectoral needs and a brief description of individual projects by sector; in some instances, for some of the countries, general characteristics are provided. Information contained in the integrated country programs should provide interested firms, especially engineering and consulting firms, with a broad view of the country's overall needs.

This type of reporting on the needs for the developing nations is expected to be more meaningful than the previous method of reporting on individual projects. The new system will enable U.S.-based firms to be more competitive in this field, as well as allow measurable lead-time for their involvement.

To date the Governing Council has approved integrated country programs for 35 nations: Algeria, Argentina, Bulgaria, Cameroon, Central African Rep., Ceylon, Chad, Chile, Colombia, Costa Rica, Cyprus, Fiji, Gabon, Ghana, Honduras, Hungary, India, Indonesia, Jamaica, Kenya, Khmer Rep., Laos, Lesotho, Malagasy Rep., Malaysia, Mauritius, Panama, Peru, Philippines, Poland, Tanzania, Togo, Uganda, Venezuela, Zaire.

Developing nations which have not yet submitted integrated country programs will continue to receive UNDP funds for individual projects as in the past.

A limited number of loan copies of the 35 approved programs will be available from the Information Services Division, OBS, BDC-584, U.S. Department of Commerce, Washington, D.C. 20230.

## Developing Nations' Producers To Get Help On Improving Products At UNIDO Meeting

"How must I modify my products to sell them in industrialized countries?"

This is the question that some 100 manufacturers from 16 developing nations will be asking when they meet face-to-face with production, marketing and distribution experts from industrialized countries at a UN-sponsored meeting in New York Oct. 2-13.

The meeting has been organized by the United Nations Industrial Development Organization (UNIDO) in co-operation with the World Trade Institute (WTI) and the U.S. Agency for International Development (AID).

The manufacturers will bring, at their own expense, samples of their goods from their respective countries. These would be shown to market technicians from developed countries, who will then suggest possible methods of adapting them to their markets. These samples will be in three catagories—home furnishings, leather products and light metal and plastics. Electrical appliances will also be considered for subcontracting purposes.

The businessmen and market technicians from the developed countries will not be present as buyers, but will act as advisers to the manufacturers from the developing countries, pinpointing areas where products need to be improved so that they might compete in export markets.

UNIDO will finance a follow-up program to implement the suggested changes. Technical experts will go to the developing countries to help manufacturers make the necessary changes at the factory and plant level.

## Greece Wants Two Mobile Television Transmitters

The General Directorate of Procurement has issued Tender No. 755/72 for the supply of two mobile television transmitting units. Equipment should include two cameras, video switching system, video tape recorder monitors, inter-communication system, and power generators. Bid deadline September 19.

Tender documents may be obtained from the General Directorate of Procurement, 4th Directorate of State Purchasers, Canningos Sq., Athens or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 1112, U.S. Dept. of Commerce, Washington, D.C., 20230, ★(202-967-4822)

# Foreign Trade Opportunities

*These trade opportunities are based on reports received from the U.S. Foreign Service by the Business Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.*

*U. S. firms should be aware that the listing in* Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Deparment of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

*Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.*

*The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.*

*WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-976, Washington, D.C. 20230.*

## Direct Sales

*Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.*

### Canning, preserving foods

20333 — JAPAN — Fresh Washington State mushrooms (Armillaria edodes). Morisho Trading Co., Ltd. (importer, dist.), 4-23 Hakataeki Higashi 2-chome, Fukuoka. WTD 7/72.

20360 — FRANCE — Frozen packaged fish, sea foods. Casacrus, S.A. (importer, dist., agent), 22, blvd. de Lorraine, B.P. 174, 06404-Cannes. WTD 7/72.

20361—JAPAN—Frozen tuna and swordfish, frozen Alaska king crabs. Morisho Trading Co., Ltd. (importer, dist.), 4-23 Hakataeki Higashi 2-chome, Hakata-ku, Fukuoka City. WTD 7/72.

### Grain mill products

20460—SPAIN—Corn byproducts. Correspondence requested in Spanish. Fertilizantes y Piensos Castilla, S.A. (importer, dist.), Carretera Fregeneda, 33, Salamanca. WTD 6/72.

### Confectionery

20730—ZAMBIA—Various types, flavors of chewing gum. Samples requested. Changa Distributors (importer, dist., mfr.), P.O. Box 2065, Lusaka. WTD in prep.

### Food preparations

20999 — IRAN — Unpopped popcorn, in consumer packages. Mofakham, Nader M. (importer, dist., agent), Takhte-Jamshid Ave., Fariman No. 124, P.O. Box 11-1562, Tehran. WTD in prep.

### Broad woven fabric mills, manmade fiber, silk

22114—JAPAN—Denim fabric for manufacturing blue jeans, about 1,000,000 yds. per yr., from firms not currently represented in Japan. Morimen, Inc. (importer, dist., mfr.), 3-23 Tenya-machi, Hakata-ku, Fukuoka, 812. WTD in prep.

### Broad woven fabric mills, wool

22310 — SWITZERLAND — Attractive broad woven, colored quality fabrics for decorative purposes in restaurants, hotels, etc. (wall-covering, curtains, etc.). Direct purchase & agency. Käser Team Design; Attn: Mr. Kaeso & Mr. Heusler (importer), Waldofstr. 46, 4900 Langenthal. WTD in prep.

### Knitting mills, products

22542 — BOLIVIA — Underwear, knit; women's, children's. Correspondence requested in Spanish. Almacenes La Fonseya (importer, retailer), P.O. Box 815, Cochabamba. WTD in prep.

22560—FRANCE—Knit stretch fabrics, cotton and polyamide. Bambino (dist., mfr.), 100, Cours du Docteur Long, 69006 Lyon. WTD in prep.

### Fabricated textile products

23920 — JAMAICA — Shower bath curtains, including plastic, coated fabrics. Direct purchase & agency. Wherry Wharf Ltd., Attn: Seymour Ferguson (importer, dist., mfr.), Newport East, Kingston. WTD in prep.

### Wood products

24996 —ETHIOPIA— Hardboard, sizes 244 x 122 cms., thicknesses in mm. 2, 3, and 4. Cappelleri & Co. Pvt. Ltd. (importer, dist.), 52 Emp. Yohannes Ave., P.O. Box 466, Asmara. WTD in prep.

### Furniture, fixtures

25990 — SWITZERLAND — Exclusive, high quality, western style furniture for hotel bars, restaurants, etc. (chairs, tables, cabinets, etc.). Direct purchase & agency. Käser Team Design; Attn: Messrs. Kaeso & Heusler (importer), Waldhofstr. 46, 4900 Langenthal. WTD in prep.

### Paper mills

26210 — UNITED KINGDOM — Tissue paper for making duplicator stencils: 600 alternatively 1,200 reels per annum 829 mm (32⅝) wide; 144 alternatively 288 reels per annum 864 mm (34") wide; wet strength tissue without gem ghatto, substance of 11-12 gsm; 60 alternatively 120 reels per annum 432 mm (17") wide; wet strength tissue without gem ghatto, substance of 10 gsm; 36 alternatively 72 reels per annum 851 mm (33½") wide; 24 alternatively 48 reels per annum 902 mm (35½") wide; wet strength tissue without gum ghatto, substance of 10 gsm; 16 alternatively 32 reels per annum 502 mm (19¾") wide; tissue with normal quantity of gum substance of 11-12 gsm. All reels to have outside diameter of approx. 20", with 3" inside diameter cores. Tissue to be wound rough side inside. Roneo Ltd. (mfr., retailer, exporter), P.O. Box 3, South St., Romford, Essex RM1 2AR. WTD in prep.

### Converted paper, paperboard

• 26400—GHANA—Alfa Manufacturing urgently requests quotations/pro forma invoices for paper insulations in standard rolls of following specifications: 220 sq. yds. 0.09 MM thick x 160.0 MM wide for "between wire layers"; 100 sq. yds. 0.57 MM thick x 80.0 MM wide and 100 sq. yds. 1.0 MM thick x 80.0 MM wide for "iron core covering"; 200 sq. yds. 0.35 MM thick x 80.0 MM wide for "final coil covering." Alfa requests suggestions on suitable varnish for use in vacuum impregnation or hard dipping processes in tropical climate. Contact: C. S. Allston, P.O. Box 5767, Accra.

26440—BOLIVIA—Wallpaper, machine, screen or handprinted. Correspondence requested in Spanish. E.M.C.I.C. Ltda. Constructora Industrial y Comercial (importer, constructing firm), Av. 16 de Julio "Alameda" Bldg., P.O. Box 1550, La Paz. WTD 4/72.

26491 — ZAMBIA — Office stationery (paper and envelopes, packaged). Requests condition of representation and/or price list for direct purchase agreement. Direct purchase & agency. Business & Office Supplies Ltd., Attn: Mr. R. K. Patel (dist., agent), P.O. Box 1711, Ndola. WTD in prep.

### Industrial chemicals

28153 — IRAN — Pigment, synthetic, organic. Niknafs & Co. (importer, dist., agent), Bouzarjomehri Ave., Saray Nikpour, P.O. Box 1216, Tehran. WTD 11/71.

28163 — BOLIVIA — Color pigments for textiles. Obrist & Cia. Ltda. (importer, agent, retailer), Avenida Pando 101, P.O. Box 214, La Paz. WTD in prep.

28183—BRAZIL—Urea. Companhia Quimica Industrial de Laminados (importer), Av. Rio Branco, 57-50 andar, Rio de Janeiro, GB. WTD 6/72.

### Synthetic materials

28214 — BRAZIL — Melamine-formaldehyde resins. Companhia Quimica Industrial de Laminados (importer), Av. Rio Branco 57-50 andar, Rio de Janeiro, GB. WTD 6/72.

28216—IRAN—Synthetic resins for protective coatings (paints and inks). Niknafs & Co. (importer, dist., agent), Bouzarjomehri Avenue, Saray Nikpour, P.O. Box 1216, Tehran.

### Drugs

● 28300—ALGERIA—The Ministry of Public Health's Pharmacie Centrale Algerienne, 2, Rue Bichat, Algiers, has issued an invitation for bids calling for the supply of drugs and pharmaceutical products. Tender Nos. 1 H73, 1 H74, and 1 H75, each with a bid deadline of September 1, call for bids on upwards of 450 items, including benzathine penicillin 2,400,000 i.u., 7,500 vials; chlortetracycline opthalmic ointment, 60,000 tubes; cycloserine 250 mg., 3,000 tablets; griseofulvin 125 mg., 12,000 tabs; nystatin suspension 100,000 i.u., 15,000 vials; nystatin ointment 100,000 i.u., 10,000 tubes; oxytetracycline 250 mg., 30,000 tabs; oxytetracycline syrup, 10,000 bots.; penicillin G sodium 500,000 i.u. injectable, 45,000 amps.; penicillin G sodium 1,000,000 i.u. injectable, 80,000 amps.; streptomycin 1 gm., 100,000 amps.; glucose 30 gm., 500 ml., 30,000 bots; paraaminosalicylate 3 gm., 500 ml., 150,000 bots.; sodium chloride 9 gm., 500 ml., 300,000 bots.; acetazolamide 0.25 gm., 2,500 tabs.; acetylsalicylic 0.20/2 gm., 10,000 suppositories; ascorbic acid 500 mg., 50,000 tabs; ascorbic acid injectable 5 ml./500 mg., 10,000 amps.; atropine sulfate eye drops 1%, 5,000 bots.; calcium bromogalactogluconate, 2,500 tabs; monosemicarbazone injectable 3.6 ml./1.5 mg., 20,000 amps.; chlorpromiazine 100 mg., 20,000 tabs.; alphachymotrypsine 5 ml./25 UCHB, 15,000 amps.; B complex syrup 90 ml., 10,000 bots.; cyanocobalamin 1 ml., 10.000 amps.; ether 125 ml., 10,000 cans; haloperidol drops 2/1000 15 ml., 50,000 bots.; levomepromazine 25 mg., 20.000 tabs.; meprobamate 0.40 gm., 10,000 tabs.; methylprednisolone 40 mg., 15,000 amps., etc. Copies of these tenders are available from the Chemicals and Rubber Division, BDC-710, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-3910). A review copy of each of these tenders also is available at the Department of Commerce Field Office: Federal Building, 450 Golden Gate Avenue, San Francisco, California 94102. ★(415-556-5864).

● 28300 — BOLIVIA — The Corporacion Minera de Bolivia, Casilla 349, La Paz, has issued an invitation calling for the supply of drugs and pharmaceuticals, sutures, surgeon's gloves, x-ray films, etc. Tender No. KDI-10/72, with a bid deadline of September 28, calls for bids on almost 500 items, including dihydostreptomycin 1 gm., 120,000 vials; chloramphenicol 250 mg., 250,000 caps.; tetracycline 250 mg., 200,000 caps.; ethambutol 250 mg., 200,000 tabs.; ethambutol 100 mg., 200,000 tabs.; sulfaguanidine 0.5 mg., 120,000 tabs.; triaminolone 4 mg., 80,000 tabs.; vitamin B1 300 mg., 100,000 tabs.; vitamin C 500 mg., 150,000 tabs.; thiazidediuretic, 60,000 tabs.; magnesium sulfate 10%/10cc., 100,000 amps.; hyoscine hydrobromide, 400,000 tabs.; dextrose 33%/20cc. w/aminoacids, 100,000 amps.; dextrose 33%/20cc., 200,000 amps.; x-ray films 14" x 14", 12,000 units; gauze bandages 4" x 10 yards, 25,000 units; catgut simple No. 00, 2,400 tubes; hemostatic sponges No. 100, gelfoam type, 2,000 envelopes; surgeon's rubber gloves No. 7, 1,200 prs.; stainless steel hypodermic needles No. 22 x 1", 3,600 units; stainless steel hypodermic needles No. 21 x 1", 1,800 units; stainless steel hypodermic needles No. 24 x 1", 2,380 units; rectal thermometers w/case, 1,200 units; oral thermometers w/case, 1,200 units; pure glycerine, 100 kgs.; sodium bicarbonate, 100 kgs.; methylsalicylate, 100 kgs.; hydrophilous cotton 1 lb., 3,000 pkgs.; gauze bandages 3" x 6 yards, 20,000 units; adhesive tape 12" x 10 yards, 10 cuts, 300 tubes; adhesive tape 12" x 10 yards, 5 cuts, 300 tubes; rubber hot water bottles, 300 units, etc. Copies of this tender are available from the Chemicals and Rubber Division, BDC-710, U.S. Department of Commerce, Washington, D.C. 20230 ★(202-967-3910). A review copy also is available at the Department of Commerce Field Office, Federal Building, 450 Golden Gate Ave., San Francisco, Calif. 94102 ★(415-556-5864).

### Soap, detergents, cleaning preparations, perfumes, cosmetics

28421 — BRAZIL — Insecticides, rodenticides. Schuko-Industria e Comercio de Produtos Quimicos Ltda. (importer), Rua da Conceição 105 - conj. 1809, Rio de Janeiro - GB. WTD 5/72.

28442 — MALAWI — Toilet water perfumes, colognes. Samples, catalogs requested. Prices preferably in Malawi currency. Cosmetic Gift Corner (importer, retailer), P.O. Box 116, Blantyre. WTD in prep.

28443 — BOLIVIA — Hair preparations. Correspondence requested in Spanish. Almacenes La Fonseya (importer, retailer), P.O. Box 815, Cochabamba. WTD in prep.

28445—MALAWI—Cosmetics, including cosmetic oils, creams. Samples, catalogs requested. Prices preferably in Malawi currency. Cosmetic Gift Corner (importer, retailer), P.O. Box 116, Blantyre. WTD in prep.

### Paints, varnishes, lacquers, enamels

28512 — BOLIVIA — Paints, emulsion, water-type. Correspondence requested in Spanish. E.M.C.I.C. Ltda. Constructora Industrial y Comercial (importer, constructing firm), Av. 16 de Julio "Alameda" Bldg., P.O. Box 1550, La Paz. WTD 4/72.

### Agricultural chemicals

● 28700—INDONESIA (Amended tender) —Ammonium sulphate, minimum 21 percent N, 14,200 metric tons; rock (natural) phosphate (based on 35 percent $P_2O_5$), finely ground, nutrient content, minimum 24 percent $P_2O_5$, 160 tons; muriate of potash (KCl), nutrient content, minimum 60 percent $K_2O$, 10,900 tons; magnesium sulphate (kieserite or similar), based on 26 percent MgO, nutrient content, 18-26 percent MgO, 6,000 tons. Tender No. 1778/A3/Y/4/72. Bid deadline 11 a.m., September 19. Bids should be addressed to Director General of Estates, Republic of Indonesia, c/o Liaison Office, P.N.P.-VII-Djalan Tjibeber 1/31, Kebajoran Baru, Djakarta, Indonesia. Purchase to be funded by IDA credit. Delivery schedule is as follows: Ammonium sulphate, 9,900 tons for arrival Belawan during December in at least two shipments and 4,300 tons during March; rock phosphate, 160 tons, for arrival Belawan during March; muriate of potash, 7,600 tons for arrival Belawan during December in at least two shipments, and 3,300 tons during March; mineral magnesium sulphate, 1,200 tons during December, and 4,800 tons during March. Copies of specifications, terms and tender documents are available from the Chemicals and Rubber Division, BDC-710, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-3468). A review copy will also be available at the Department of Commerce Field Office, 11444 Federal Building, 450 Golden Gate Ave., San Francisco, Calif. 94102. ★(415-556-5868).

28790—BRAZIL—Herbicidal preparation for sterilization of soil against weeds; aquatic weeds. Schuko-Industria e Comercio de Produtos Quimicos Ltda. (importer), Rua da Conceição 105-conj. 1809, Rio de Janeiro-GB. WTD 5/72.

● 28700—LIBYAN ARAB REPUBLIC—Ammonium sulfate, crystals, minimum 21 percent N, 10,000 metric tons: di ammonium phosphate, 18-47-0, 24,000 tons; superphosphate, 3,000 tons; potassium sulfate, 50/52 percent $K_2O$, 1,000 tons; and compound fertilizer, 12-24-12, 3,500 tons. Also included are insecticides and high quality seeds suitable for planting in fertile and semi-arid regions of Lar, particularly wheat and barley. Quantities and specifications for the latter items were not reported. No tender number or bid deadline indicated. Bids and inquiries should be sent to Mr. Adnan Al-Teraki, Managing Director, or Mr. S. S. Elbaz, Commercial Manager of the General Company for Agricultural Tools and Equipment, Tatanaki Building, Istiklal Street, Apartment Number 1, Tripoli, Libyan Arab Republic. Complete specifications and tender documents being forwarded. and upon receipt will be available from the Chemicals and Rubber Division. BDC 710, U.S. Dept. of Commerce. Washington, D.C. 20230, ★(202-967-3468).

### Chemical products

28993—IVORY COAST—Chemical products for purifying water including drinking water, industrial water, water for swimming pools. Correspondence requested in French. Monsieur Hariga, Société A B I (Abidjan Industrie) (importer, dist., mfr.), Boîte Postale 343, Abidjan. WTD 6/71.

### Plastic products

30792—BOLIVIA—Decorations, plastics. Correspondence requested in Spanish. Almacenes La Fonseya (importer, retailer), P.O. Box 815, Cochabamba. WTD in prep.

30797—GERMANY—Household, kitchen utensils of plastic material. Vereinigte Buerstenfabriken G.m.b.H. (mfr.), 7868 Todtnau, Schwarzwaldstrasse 15. WTD 7/72.

30797—JAPAN—High quality modern design plastic kitchenware. Pan Japan Trading Co., Ltd. (importer, dist.), 5-20 Kumamoto 3-chome, Kokura-ku, Kitakyushu. WTD in prep.

30798—IVORY COAST—Portable swimming pools made of plastic. Correspondence requested in French. Monsieur

Hariga, Société A B I (Abidjan Industrie) (importer, dist., mfr.), Boîte Postale 343, Abidjan. WTD 6/71.

### Handbags, personal leather goods

31710 — JAPAN — Ladies metal-mesh, beaded handbags, purses. Pan Japan Trading Co., Ltd. (importer, dist.), 5-20 Kumamoto 3-chome, Kokura-ku, Kitakyushu City. WTD in prep.

### Leather goods

31990 — SWITZERLAND — Saddles, related leather items for decorative purposes. Direct purchase & agency. Käser Team Design; Attn: Mr. Kaeso & Mr. Heusler (importer), Waldhofstr. 46, 4900 Langenthal. WTD in prep.

### Flat glass

32111—BOLIVIA—Glass, sheet, window. Correspondence requested in Spanish. E.M.C.I.C. Ltda. Constructora Industrial y Comercial (importer, construction firm), Av. 16 de Julio "Alameda" Bldg., P.O. Box 1550, La Paz. WTD 4/72.

### Pottery, related products

32610—BOLIVIA—Bathroom accessories; vitreous china, earthware. Correspondence requested in Spanish. E.M.C.I.C. Ltda. Constructora Industrial y Comercial (importer, construction firm), Av. 16 de Julio "Alameda" Bldg., P.O. Box 1550, La Paz. WTD 4/72.

32610—JAMAICA—Vitreous china bathroom sanitary accessories (including bath tubs, bidettes, water closet bowls (low-down and high-up), basins, recessed soap dishes, recessed toilet paper holders, towel racks). Direct purchase & agency. Wherry Wharf Ltd. Attn: Seymour Ferguson (importer, dist., mfr.), Newport East, Kingston. WTD in prep.

32630 — BOLIVIA — Kitchenware, fine earthware; household, commercial. Correspondence requested in Spanish. Almacenes La Fonseya (importer, retailer), P.O. Box 815, Cochabamba. WTD in prep.

### Abrasive, asbestos, nonmetallic mineral products

32950—JAPAN—Clay for rubber manufacturers; reducto clay, crown clay and dexi clay; 100 M/T each. Inuiu Yakuhin Kogyo Co., Ltd. (importer, mfr.), 35, 2-chome, Doshomachi, Higashi-ku, Osaka. WTD 5/72.

### Steel mill products

● 33100—INDIA—30,000 kgs. soft iron strip. Tender No. P/202/49/106/29.6.72/PL from the Director General, Supplies and Disposals, Jeevantara Building, Parliament St., New Delhi. Available from the India Supply Mission, 2536 Massachusetts Ave., N.W., Washington D.C. 20008 for $2. Bid deadline October 4. IDA credit.

●33100—IRAN—300 pieces wagon axle. Tender No. 654/51 Iranian State Railways. Bid deadline September 20. Copies of above tender may be obtained from Iron and Steel Program-786, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-2613).

33123—ETHIOPIA—Tinmill black plates, rejects, assorted guage and size. Ethiopian Household Utilities Sh. Co. (mfr.), P.O. Box 221, Asmara. WTD in prep.

33123—ETHIOPIA—Hot rolled mild steel sheets, spec. JIS-G-3101-SS41 sizes: 1.5x3 mtrs., thicknesses in m.m. 3 up to 6; hot rolled mild steel, 6 mtr. long bars, equal angles sizes: 3x25x25 m.m.; 4x30x30 m.m.; 4x40x40 m.m. SABA Trading Co. (Private) Ltd. (importer, dist.), 11-13 Adi Ugri St., P.O. Box 367, Asmara. WTD in prep.

33126 — ETHIOPIA — Galvanized and black steel pipes, light weight, sizes ½" up to 4". S.A.C.I.S.A. (importer, dist.), 18/20 Zerayacob St., P.O. Box 362, Asmara. WTD in prep.

33127 — ETHIOPIA — Cold rolled steel sheet, oiled, dull finish, spec. JIS-3141-SPCC sizes: 2x1 mtrs., thicknesses in m.m. 0.8 up to 3. SABA Trading Co. (Pvt.) Ltd. (importer, dist.), 11-13 Adi Ugri St., P.O. Box 367, Asmara. WTD in prep.

33127 — ETHIOPIA — Cold rolled steel sheets, size 2x1 mtr., thicknesses in m.m. 0.8 up to 3. Cappelleri & Co. Pvt. Ltd. (importer, dist.), 52 Emp. Yohannes Ave., P.O. Box 466, Asmara. WTD in prep.

33127 — ETHIOPIA — Cold rolled steel sheets in coils, rejects only. Ethiopian Household Utilities Sh. Co. (mfr.), P.O. Box 221, Asmara. WTD in prep.

33127—ETHIOPIA—Cold and hot rolled steel sheets and plates, sizes 0.6 m.m. up to 20 m.m. S.A.C.I.S.A. (importer, dist.), 18/20 Zerayacob St., P.O. Box 362, Asmara. WTD in prep.

### Primary smelting, refining of nonferrous metals

33323—VENEZUELA—Mining company extracting boulangerite (antimony lead sulfide) seeks service contract with U.S. company which would import, process and then return mineral extracted by Venezuelan company. Mineral contains lead, antimony, gold and silver. Actual extracting rate 200 metric tons monthly, but figure expected to be raised to 1,100 metric tons monthly first yr. Requests quotations on operation tolls and sea and land freights. Minas Carmen de Cocuaima C.A. (mining enterprise), Edificio Cediaz, torre Este, oficina 114, Avenida Casanova, Caracas. WTD 7/72.

### Rolling, drawing, extruding of nonferrous metals

● 33500 — PARAGUAY — Cable, ACSR, 300MCM, 40,000 mtrs., Tender #ANDE-IDB-47/72, bid deadline September 5. I.D.B. loan #304/SF-P.R., documents available for U.S. $5 from Division de Adquisiciones, Department de Licitaciones, ANDE, Calle Padre Cardozo 560, Asuncion.

33512—INDIA—Bimetal strips for manufacturing bearings, bushings: steel backed cast copper lead strips; steel backed 80/10/10 bronze strips; 444 solid bronze strips. Bimetal Bearings Ltd. (mfr.), Huzur Gardens, Sembium, Madras 11. WTD in prep.

33560—INDIA—Steel backed tin based babbitt and lead based babbitt strips for manufacturing bearings, bushings. Bimetal Bearings Ltd. (mfg.), Huzur Gardens, Sembium, Madras 11. WTD in prep.

### Nonferrous foundries

33620 — INDIA — Bimetal semi-finished shells for manufacturing bearings and bushings. Bimetal Bearings Ltd. (mfg.), Huzur Gardens, Sembium, Madras 11. WTD in prep.

### Primary metal industries

33991—INDIA—Pre-alloyed copper lead powder and leaded bronze powder for manufacturing bearings and bushings. Bimetal Bearings Ltd. (mfg.), Huzur Gardens, Sembium, Madras 11. WTD in prep.

### Metal cans

34110—ETHIOPIA—Flattened cans with respective loose ends ready for seaming, in British standard measurement: 211x205; 211x301; 211x414 and 401x411. All cans internally laquered; lift and pull off top cans, all sizes. Sarice Pvt. Ltd. Co. (mfr.), 36 Fit. Zeferu Tesfazghi St., P.O. Box 674, Asmara. WTD in prep.

### Hand tools, general hardware

34211—SWITZERLAND—Snips, shears, cutters for metalworking jobs. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zugerstr. 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

34231 — ZAMBIA — Electricians' hand tools. Direct purchase & agency. Baldwin Robison (Zambia) Ltd., Attn: R. J. Foale (importer, dist., agent), P.O. Box 542, Ndola. WTD in prep.

34250 — SWITZERLAND — Hand saws, accessories, for metalworking industry. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zugerstr. 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

### Heating, plumbing fixtures

34310—JAMAICA—Cast iron enameled bath tubs. Direct purchase & agency. Wherry Wharf Ltd., Attn: Seymour Ferguson (importer, dist., mfr.), Newport East, Kingston. WTD in prep.

34320—JAMAICA—Plumbing fixture fittings and trim (brass goods). Direct purchase & agency. Wherry Wharf Ltd., Attn: Seymour Ferguson (importer, dist., mfr.), Newport East, Kingston. WTD in prep.

34330 —YUGOSLAVIA— Equipment for converting refined fuel oil to crude oil. Consumption at 210 MW thermo-electric power station would be about 50 tons per hr. Specifications, prices sought for viscosity meter for (fuel) oil; instrument for measuring water/steam ratio present in condenser, system for direct digital control of steam generating portion of an electrical energy plant. Termoelektrana (electric energy plant), Josip Aralica, engineer, Asst. Dir. (or eng. Zeljko Nikolic). Termoelektrana Sisak, 4400 Sisak. WTD in prep.

### Fabricated structural metal products

34411—BOLIVIA—Iron and steel, aluminum, fabricated, structural for buildings. Correspondence requested in Spanish. E.M.C.I.C. Ltda. Constructura Industrial y Comercial (importer, constructing firms), Av. 16 de Julio "Alameda" Bldg., P.O. Box 1550, La Paz. WTD 4/72.

### Screw machine products

34510—BOLIVIA—Household appliances, screw machines (including radio, television). Correspondence requested in Spanish. Almacenes La Fonseya (importer, retailer), P.O. Box 815, Cochabamba. WTD in prep.

### Metal stampings

34615 — JAPAN — High quality kitchen utensils for home use. Pan Japan Trading Co., Ltd. (importer, dist.), 5-20 Kumamoto 3-chome, Kokura-ku, Kitakyushu City. WTD in prep.

### Fabricated metal products

34941—IVORY COAST—Field sprinkler systems for large scale agricultural pur-

poses including pipes, pumps, sprinkler heads for irrigation. Correspondence requested in French. Monsieur Hariga, Société A B I (Abidjan Industrie) (importer, dist., mfr.), Boîte Postale 343, Abidjan. WTD 6/71.

### Engines, turbines

35111—FRANCE—Hydraulic motors for machine control. Etablissements Pautou (mfr.), 36 rue Jules Ferry, 92-Courbevoie. WTD in prep.

35192—BOLIVIA—Diesel engines. Obrist & Cia. Ltda. (importer, agent), Avenida Pando 101, P.O. Box 214, La Paz. WTD in prep.

### Farm machinery

● 35200—ALGERIA—Mobile Irrigation Sprinkler system to cover approximately 200 hectares. Offer to be submitted in French. Bid deadline September 15. Bid No. A.O.cc 49/72. Contact: Ministere de l'Agriculture et de la Reforme Agrarian, D.T.C., Bureau des Marches, 12 Blvd., Colonel Amirouche, Algiers.

● 35200—ALGERIA—The Ministry of Agriculture has issued an invitation for bids calling for supply of storage refrigeration and transport equipment for milk. The tender is in five parts. 1.) 20,000 aluminum 20 liter milk cans, 2.) 120 refrigerated storage tanks, 3.) 50 refrigerated tanks for milk cans, 4.) 20 Cisterns of 5,000 liters, 5.) five semi-trailers with tanks for milk transport. Bid deadline September 15. Copy of specs in French available from General Industries Division, BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230, ★(202-967-4317).

35228 — FRANCE — Manure treatment units to be used in hog breeding plants to eliminate manure. Sogem (mfr., turnkey), 8 rue Blaise Pascal, 92 - Neuilly. WTD in prep.

### Construction, mining, materials handling machinery, equipment

●35300—SRI LANKA (CEYLON)—Two road graders, 65 H.P., weight approximately 12,000 lbs., diesel powered. Lift Irrigation Project, bid deadline October 10, 1972. Specifications available at Embassy of SRI LANKA (CEYLON), 2148 Wyoming Ave., N.W., Washington, D.C.

● 35300—IRAN—Pumps and Drivers for Tehran-Tabriz Pipeline Project (Phase 1). Tender No. 7; bid deadline September 30. National Iranian Oil Co., Engineering & Construction Group, Ave. Takhte Jamshid (3rd bldg.), opposite of Hotel Sina, Tehran. Specifications available on a short term loan basis to firms domiciled in the U.S. from General Industries Div., BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230, ★(202-967-5593).

● 35300—IRAN—Valves for the Tehran-Tabriz Pipeline Project (Phase 1). Tender No. 5; bid deadline September 16. National Iranian Oil Co., Engineering & Construction Group, Ave. Takhte, Jamshid (3rd bldg.), opposite Hotel Sina, Tehran. Specifications available on a short term loan basis to firms domiciled in the U.S. from General Industries Div., BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230, ★(202-967-5593).

● 35300—IRAN—Pipeline scraper traps, crossing accessories, insulating joints, and gaskets. Tehran-Tabriz Pipeline Project (Phase 1). Tender No. 3; bid deadline September 14. National Iranian Oil Co., Engineering & Construction Group, Ave. Takhte Jamshid (3rd bldg.), opposite Hotel Sina, Tehran. Specifications available on a short term loan basis to firms domiciled in the U.S. from General Industries Div., BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230, ★(202-967-5593).

## Special Action

*Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.*

**30794—IRAN—Packaging & shippin containers, plastic to replace heavier metal containers presently used for cocoa, coffee, cereals. Exclusive agency. Rassoulzadeh Mahmoud (importer, dist., agent), West Takhte-Jamshid Ave., Chahr-Rahe Fariman, Majid Building, Tehran. WTD in prep.**

**37130 —SWITZERLAND— Street, sidewalk flushers, sprinklers, sweepers, truck mounted hoists, cranes, catastrophe ambulances, sewage ejectors, other truck mounted municipal utility vehicles. Exclusive distributorship. Carrosserie Grogg AG, Attn: Mr. Hansjorg Grogg (body repair shop), Stettbachstr. 4, 8600 Dubendorf. WTD 5/72.**

**39913 — FINLAND — Pneumatic scrapers (brushes) for natural gas pipe line from Soviet Union to Finland. Yrjö Laakso & Co., Oy, Attn: Mr. Yrjö Laakso, mng. dir., Mannerheimintie 16,00100 Helsinki 10. WTD 3/72.**

**20110 — GERMANY — Refined, hydrogenated tallow, iodine value max. 1, flaked, packed in multiple paper bags, poly-lined, net content 25 kilograms each, for use in emulsifiers for food products. Quantity approx. 5 metric tons per mo. Requests offers c.i.f. Hamburg. Guenther Fienow, Emulgatoren (importer), 2 Hamburg 11, Alter Fischmarkt 11. Telegram address Woneig Hamburg. Telex: 0216 1241 (Gino). WTD in prep.**

**20373 — BELGIUM — Frozen offals, frozen beef tongues. Prices c.i.f. Antwerp. Sercu & W. Crombez (importer), Paterstraat 8, Ieper 8900. WTD in prep.**

**35595 — DOMINICAN REPUBLIC —Complete salt refinery plant, including packaging machinery. Specifications: required capacity 50 tons per day (24 hr.); packaging plant with processing capacity of 1,500 -26 oz. carton cylinders per hr. Raw material approximately 90 percent pure and obtained by solar evaporation. Impurities include calcium sulphide, magnesium chloride, earth. Sample analysis recommended. Power available: 110 volts, 60 cycles, 1-3 phases. Water volume (unreliable): 10 $m^3$ per hr. End product to be used for table salt (50 percent) and for industrial purposes (50 percent). Requests replies in Spanish. Corporacion Dominicana de Empresas Estatales (CORDE), Attn: Dr. Jose A. Quezada T., Dir. Gen. & Secretary of State, Santo Domingo.**

●35300—LIBYA—Cranes—Tender No. 1440. Contact: Ports and Lights Corp., Damascus Street, Tripoli, Libyan Arab Republic for Documents and Specifications. Material required two 30 ton cranes and twenty 5 ton cranes. Bid deadline Sept. 18. Bidders must have local agent.

35319 — SWITZERLAND — Powered brooms. Carrosserie Grogg AG (body repair shop), Stettbachstr. 4, 8600 Dubendorf. WTD 5/72.

35319—SWITZERLAND—Handheld contractors' air tools, circular saws, sanders, hammers, drills, chisels, fixing tools. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zugerstrasse 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

35361—SWITZERLAND — Hand, chain, wire rope hoists, parts, attachments. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zugerstr. 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

35362 — SWITZERLAND — Hydraulic aerial platforms, carrier mounted. Carrosserie Grogg AG (body repair shop), Stettbachstr. 4, 8600 Dubendorf. WTD 5/72.

### Metalworking machinery

35420—ZAMBIA—Machine for manufacture of office pins, clips, straight pins and drawing pins of all sizes, diameters. Quote landed cost. Norie Distributors Ltd. (importer, dist., agent), P.O. Box 929, Ndola. WTD in prep.

35451—GERMANY—Carbide milling cutters (end, plain, side, and face mills; form relief) reamers and countersinks. Hermann Hornung Praez.-Werkzeug-Fabrik (dist., mfr.), 7553 Muggensturm/Baden, Am Wasserwerk 1. WTD 7/72.

35480—TURKEY—Machinery for manufacture of automobile gaskets including cylinder heads, related parts for cars, trucks, buses; machinery should have production capacity per yr. Manufacturer of steel forks for carrying hay desires to obtain suitable equipment for rolling and pointing bars. Machinery required is for tapering 140 mm. length of bar from 8 mm. on one side to approx. 1.5 mm. on the other; quantity required approx. 100,000 pieces per yr. United Nations Industrial Development Organization, Suburcu Caddesi, Burc Binasi P.O. Box 161, Gaziantep.

35482 — SWITZERLAND — Pneumatic handtools, drills, screwdrivers, assembly tools, polishers, grinders, sanders, routers, planers, parts, accessories. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zugerstrasse 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

### Special industry machinery

● 35500 — PAKISTAN — One medium-sized reclamation plant for lubricating oils of SAE-30 and SAE-40 grades. Tender No. not specified; bid deadline September 11. Tender documents are available from Secretary, Railway Board, Empress Rd., Lahore or from District Controller of Purchase, P.W.R. Karachi Cantonment for approx. $3 per set, plus $1 for postage. When received, review copies of the tender documents will be available on a short term loan basis to firms domiciled in the U.S. from General Industries Div., BDC-772. U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-5593).

**35510 — BRAZIL** — Wine pasteurizing equipment. Correspondence requested in Portuguese. Sindicato das Industrias de Bebidas, Attn: Mr. Nilo Ludovico Zanier (association of beverage manufacturers), Av. Ernesto Gaertner 1673, Caixa Postal 419, 80000 Curitiba, Paraná.

**35512 — ISRAEL** — Complete plant for processing dough for biscuits/crackers; capacity one ton per hr.; to include mixers, slicers, combinations slicing-wrapping machines, related equipment, accessories. Plant to begin operation early 1973. Danenberg Export (1971) Ltd. (importer, dist., bakery), P.O. Box 2574, Tel Aviv. WTD in prep.

**35512—ZAMBIA**—Machinery for making cookies (biscuits); hard candy; chewing gum. Requests price lists, catalogs. Changa Distributors (importer, dist., mfr.), P.O. Box 2065, Lusaka. WTD in prep.

**35513—FRANCE**—Animal feed processing machinery (cereal and animal feed popping machinery). Sogem (mfr., turnkey), 8 rue Blaise Pascal, 92 - Neuilly. WTD in prep.

**35513 — ZAMBIA** — Small flour milling plant, complete with attachments and recommended spare parts for one yr. Requests quotes landed cost to Zambia, output per hr. in bags of 15x90 kilograms; send catalogs of plant well in advance. Kabwe Milling Co., Attn: M. Morala (dist., mfr.), P.O. Box 493, Ndola. WTD in prep.

**35531 — BOLIVIA** — Sawmill equipment. Obrist & Cia. Ltda. (importer, agent), Avenida Pando 101, P.O. Box 214, La Paz. WTD in prep.

**35532 — SWITZERLAND** — Home workshop woodworking machinery. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zugerstrasse 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

**35540—ZAMBIA**—Machine for manufacturing box files; machine should also be capable of making assorted sizes of box files. Quote landed cost to Zambia and type and style of box files that can be made. Business & Office Supplies Ltd., Attn: R. K. Patel (dist., agent), P.O. Box 1711, Ndola. WTD in prep.

**35595 — COLOMBIA** — Engineering services, glass forming machinery, complete equipment for glass handling, annealing, complementary equipment for glass processing in general. Power supply equipment of 2,500 KW with stand-by of same capacity. Raw materials handling and processing equipment. Glass plant will mainly produce narrow neck soft drink containers. Plant capacity estimated at 120 metric tons glass per day. Requests offers be as complete as possible, supplemented with record of services and performances of previous similar projects completed, and equipment applications in glass industry. Technical and commercial catalogs requested. Cristalería Postolux S.A., Attn: Dr. Léon Dominguez, Pres. (mfr.), Edificio Furatena, Calle 50 No. 46-36, Oficina 705, Apartado aéreo (P.O. Box) 683, Medellin. WTD in prep.

**35595—GREECE**—One rotary kiln with all accessories and option to purchase second, to produce burnt magnesite for annual production capacity of approximately 50,000 tons. Firm offers cash payment. Interested firms should contact and send prospectus to: Paris Nicoliadis, Gen. Dir., Larco S.A., 20 Amalias St., Athens. WTD 5/72.

**35595—INDIA**—Continuous process coal-tar distillation plant of 1,000 tons capacity per month. Requests technical literature, prices c.i.f. Calcutta. Bhilai Chemical Industries, Attn: O. P. Nangalia (mfr.), 4 Narayan Prasad Babu Lane, Calcutta-7. WTD in prep.

**35595—INDIA**—Fluorescent lamp starter manufacturing machinery; one unit each: automatic stem making and mounting machine; 16-head flattening sealing-in machine; 24-head sealing-in and exhausting automatic pinching machine; 10 unit circular vacuum pump—complete with standard electromotor, starting switch and gas ballast valve; vane type vacuum pump, with sliding ring electromotor, motor starting switch, oil tank with belt guard cover mounted on common base, output 150 $m^3$/hr.; high frequency Tesla apparatus; argon gas flushing apparatus without cylinder; activating, measuring and sorting equipment; 4-place mounting table with gas heated soldering but, gas air mixing valve; case closing device; connecting pin grinding motor. Requests technical literature, prices c.i.f. Calcutta/Bombay. Jajodia (Overseas) Private Ltd., Attn: Mr. B. Datta, Development Mgr. (mfr.), 4 Ganesh Chandra Ave., Calcutta-13. WTD in prep.

**35595—LIBYA**—Complete factory with all accessories to produce 55 gal. steel drums. B Yasin Buseif Yasin (importer, mfr.), P.O. Box 1828, Benghazi. WTD in prep.

**35595—ZAMBIA**—Machine for making buttons; machine must be capable of manufacturing buttons of all sizes. Quote landed cost to Zambia. Norie Distributors Ltd. (dist., agent), P.O. Box 929, Ndola. WTD in prep.

**35595—ZAMBIA**—Machine for making suitcases (fiberboard); machine preferred must be capable of also making travelling goods such as brief cases. Requests catalogs stating styles complete machine can manufacture. Quote landed cost. Ambica Suitcase Manufacturers Ltd., Attn: D. C. Patel, mng. dir. (mfr.), P.O. Box 381, Ndola. WTD in prep.

### General industrial machinery

**●35600 — TAIWAN** — Two ignition oil pumps and motors for utility power station known as Unit No. 5 of Talin Power Station. Contact: Gibbs and Hill Inc., 393 Seventh Ave., New York, N. Y. 10001. Attn: S. M. Loo.

**35613—IVORY COAST**—Domestic water systems, accessories including taps, pipes. Correspondence requested in French. Monsieur Hariga, Société A B I (Abidjan Industrie) (importer, dist., mfr.), Boîte Postale 343, Abidjan. WTD 6/71.

**35642 — JAPAN** — Air pollution control technology for licensing, and air pollution control equipment for import. Kankyo Gigutsu, Inc. (pollution engineering co.), 22-1 Jinnohara 2-chome, Yawata-ku, Kitakyushu. WTD in prep.

**35642 — JAPAN** — Air pollution control equipment for import. Nagata Seisakusho Co., Ltd. (mfr.), 10-1 Kitaminato-machi, Wakamatsu-ku, Kitakyushu. WTD in prep.

**35662—INDIA**—Girth gear for 1200 TPD dry process cement kiln; to be fitted on kiln 4.35 M by spring plates to allow expansion; gear specifications: gear rim in 4 parts suitably bolted with tight fittings bolts in cast steel; module 42; number of teeth 160; weight 14.125 tons (approx.); outside diameter 6.8 m. Pinion for above cement kiln; motor for kiln drive proposed to be used 240 hp; specifications: pinion made of solid cast steel; module 42; number of teeth 19; weight 1.5 tons (approx.); outside diameter 0.882 m. Madras Cements Ltd. (mfr.), Ramasamyraja Nagar, Thulukkapatti R.S. (P.O.), Ramnad District, Tamil Nadu. WTD in prep.

**35690—GERMANY**—Environmental pollution control equipment and supplies (air, water, industrial, municipal wastes). Direct purchase & agency. Georg M. Langer & Co. (importer, dist., mfr.), 3 Stendorfer Strasse, P.O. Box 1, 2863 Ritterhude. WTD 5/72.

**35690—JAPAN**—Large centrifugal separator, more than 75 KW, with processing capacity of 20 cubic meters per hr., for water pollution control, for import or licensing. Kankyo Gijutsu, Inc. (pollution engineering company), 22-1 Jinnoharu 2-chome, Yawata-ku, Kitakyushu. WTD in prep.

**35690 — SWITZERLAND** — Heavy duty air jacks, trailer type stabilizing jacks, metal marking machines. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zugerstr. 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

### Service industry machinery

**35891 — IVORY COAST** — Commercial cooking equipment including, cookers, stoves, ovens, toasters, coffee urns, etc. Correspondence requested in French. Monsieur Hariga, Société A B I (Abidjan Industrie) (importer, dist., mfr.), Boîte Postale 343, Abidjan. WTD 6/71.

**35892—JAPAN**—Water pollution control technology for licensing and water pollution control equipment for imports. Nagata Seisakusho, Co., Ltd. (mfr.), 10-1 Kitaminato-machi, Wakamatsu-ku, Kitakyushu. WTD in prep.

**35892—JAPAN**—Water pollution control technology for licensing and water pollution control equipment for import. Kankyo Gijutsu, Inc. (pollution engineering company), 22-1 Jinnoharu 2-chome, Yawata-ku, Kitakyushu. WTD in prep.

### Electric transmission, distribution

**36110—IRAN**—Electrical testing laboratory. Quantities, specifications to be determined through direct correspondence. Parosan Co. Ltd. (importer, dist., agent), 116 Iranshahr Ave., Tehran. WTD 7/71.

**36110—JAMAICA**—One automobile battery vibration tester, new or used. Specifications: L.A.B. Reliability Vibration Test Machine, Type—ARB-30x40-400, or exact equivalent. Information and price requested. Surplus U.S. Army ordnance vibration tester matching specifications acceptable. Karl Lue-Shing, Chief, Electrical Laboratory, Bureau of Standards (govt. body), 6 Winchester Rd., P.O. Box 113, Kingston 10.

**36131—ZAMBIA**—Electrical contracting materials such as switchgear, switches, spares. Direct purchase & agency. Baldwin Robison (Zambia Ltd.), Attn: R. J. Foale (importer, dist., agent), P.O. Box 543, Ndola. WTD in prep.

### Electrical industrial apparatus

**36231 — SWITZERLAND** — Arc welding shields, protective partitions; arc welding accessories, new products. Exclusive sales rights requested. Hasberg AG, Attn: Mr. J. Kirchner (importer, dist.), Zuger-

strasse 162, P.O.B. 112, 8820 Wadenswil. WTD 7/72.

### Household appliances

**36343—GERMANY**—Portable electronic air purifiers for domestic and institutional use, alternating current, 220 volts, 50 cycles. Direct purchase & agency. Georg M. Langer & Co. (importer, dist., mfr.), 3 Stendorfer Strasse, P.O. Box 1, 2863 Ritterhude. WTD 5/72.

**36343—ZAMBIA**—Domestic electrical appliances. Direct purchase & agency. Baldwin Robison (Zambia) Ltd., Attn: R. J. Foale (importer, dist., agent), P.O. Box 542, Ndola. WTD in prep.

### Electrical lighting, wiring equipment

**36422 — SWITZERLAND** — Attractive, rustical, or western type lighting fixtures, lamps of all kinds for use in restaurants, hotels, etc. (electric and non-electric). Direct purchase & agency. Käser Team Design; Attn: Mr. Kaeso & Mr. Heusler (importer), Waldhofstr. 46, 4900 Langenthal. WTD in prep.

### Radio, television receiving sets

**36520 — ETHIOPIA** — Pre-recorded cassettes, cartridges, phonograph records. Purchases in fairly large quantities. Administrator, Ethopian Tourist Organization (ETO) (importer, retailer), P.O. Box 2183, Addis Ababa. WTD in prep.

### Communication equipment

• **36620—IRAN**—The Iranian State Railways would like to purchase 150 field telephone sets with metallic or unbreakable plastic covers. Tender No. 596/51, bid deadline October 7. Tender documents available on a short-term loan basis to firms located in the U.S. from the Communications and Electronics Division, BDC-720, Room 1112, U.S. Dept. of Commerce, Washington, D.C. 20230, ★(202-967-4822).

• **36620—IRAN**—The Iranian State Railways requires two (2) high-frequency, single-side-band transmitters and twenty-five (25) pocket radio telephone sets. Tender No. 1358-1359/51, bid deadline October 1. Tender documents available on a short-term loan basis to firms located in the U.S. from Communications-Electronics Division, BDC-720, Room 1112, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-4822).

• **36620 — THAILAND** — The Telephone Organization of Thailand requires cable and pulse code modulation equipment. Tender No. 145/2515, bid deadline October 2. Specifications may be obtained for $250 per set from the Treasury Div., Telephone Organization of Thailand, Ploenchit Rd., Bangkok.

**36622—FRANCE** — Closed circuit television systems for home, office security. Sedimap (dist., mfr., retailer), 20, rue Royale, Paris ler. WTD in prep.

**36623—FRANCE**—Electric alarm and signal systems, devices for protecting property. Sedimap (dist., mfr., retailer), 20, rue Royale, Paris ler. WTD in prep.

**36625—FRANCE** — Electronic detection apparatus, including radar systems for protection of property. Sedimap (dist., mfr., retailer), 20, rue Royale, Paris ler. WTD in prep.

### Electrical machinery, equipment

• **36900—IRAN**—Supply of 1,750 large size 1.5 volt dry cell batteries. Tender Notice No. 1091/51. Bid deadline September 9. Purchasing Department, Ministry of Roads, Iranian State Parkway, Teheran, Iran. Specifications available on a short term loan basis to firms domiciled in the U.S. from Consumer Products Division, BDC-730, U. S. Dept. of Commerce, Washington, D.C. 20230, ★(202-967-5345).

**36920—FRANCE**—Electric batteries for watches. Etablissements Pautou (mfr.), 36 rue Jules Ferry, 92-Courbevoie. WTD in prep.

**36992—GERMANY** — Air ionizers for domestic and institutional (including medical and offices) use as well as for installation in cars, public conveyances, alternating current, 220 volts, 50 cycles for domestic use, and direct current, 12 volts, 30 mA for cars. Direct purchase & agency. Georg M. Langer & Co. (importer, dist., mfr.), 3 Stendorfer Strasse, P.O. Box 1, 2863 Ritterhude. WTD 5/72.

### Motor vehicles, equipment

**37112—SWITZERLAND** — Heavy duty pickup, panel, van, dump, platform trucks, also 3 axle types with two axles propelled. Carrosserie Grogg AG, Attn: Mr. Hansjörg Grogg (body repair shop), Stettbachstr. 4, 8600 Dubendorf. WTD 5/72.

**37141—FRANCE**—Pumps for hydraulic control. Etablissements Pautou (mfr.), 36 rue Jules Ferry, 92-Courbevoie. WTD in prep.

**37141—INDIA**—Carbon graphite rings for water pump assemblies to be used in gasoline, diesel, and internal combustion engines. Quality Products Enterprises (importer, mfr.), 28-A Muthial Reddy St., Alandur, Madras 16. WTD 7/72.

### Ship building, repairing

**37313—ARGENTINA**—Seismic research ship, used, not more than 5 yrs. old, costing approximately $1.5 million; equipped with seismic research equipment cleared of complications on royalty payments, as well as offshore petroleum research gear. Yacimientos Petroliferos Fiscales (state petroleum agency), Av. R.S. Peña 777—9° Piso, Buenos Aires. WTD in prep.

### Engineering, laboratory, scientific, research instruments

**38113—TRINIDAD & TOBAGO** — Surveying instruments, accessories. Direct purchase & agency. Davidson-Arnott & Co., Ltd. (importer, dist., agent), 110 Henry St., Port of Spain. WTD 6/72.

### Instruments for measuring, indicating, controlling physical characteristics

• **38200—GHANA** — Supply of 7,000 water meters in the following quantities and diameters: 6,000-½"; 1,000-¾". Tender No. Contract W/1C, bid deadline September 15. Invited by Ghana Water & Sewerage Corporation, P.O. Box M-194, Accra, Ghana. Tender documents available, at Cedi 20.00 (1 Cedi equals US 78 cents) per copy, from Tahal Consulting Engineers Ltd., P.O. Box 1645, Accra, Ghana. A copy is available for review only, not for loan, in the Business, Photographic and Scientific Equipment Division, Room 1128, U.S. Dept. of Commerce, Washington, D.C.

• **38200—IRAN** — Supply of pressure transmitters, pressure recorders, pressure controllers-indicators, flow and temperature recorders, specific gravity recorders, pressure indicators, temperature monitoring systems and indicators, etc. Tender No. 12, bid deadline September 17. Tender documents available from National Iranian Oil Company, Engineering and Construction Group, Ave. Takhte Jamshid (3rd Building), Opposite of Hotel Sina, Tehran, Iran. A copy is available for review only, not for loan, in the Business, Photographic and Scientific Equipment Division, Room 1128, U.S. Dept. of Commerce, Washington, D.C.

• **38200—IRAN**—Supply of sonic type specific gravity detector and transmitter; radiation type specific gravity detector and transmitter; level transmitters-indicators; average temperature detectors-transmitters; temperature indicators. Tender No. 13, bid deadline September 17. Tender documents available from National Iranian Oil Company, Engineering & Construction Group, Ave. Takhte Jamshid (3rd Building), Opposite of Hotel Sina, Tehran, Iran. A copy is available for review only, not for loan, in the Business, Photographic and Scientific Equipment Division, Room 1128, U.S. Dept. of Commerce, Washington, D.C.

**38213 — SWITZERLAND** — Hardness testing apparatuses for grinding wheels, working with principle of rotating chisel. Meister Abrasive Works Ltd., Attn: Mr. Mueller (importer, mfr.), 8450 Andelfingen. WTD in prep.

### Photographic equipment

• **38600—CEYLON**—Supply of duplitized X-ray films, size 15" x 12", 5,000 packets; size 12" x 10", 5,350 packets; size 10" x 8", 1,425 packets; size 14" x 14", 440 packets; dental X-ray radiatized films, size 1¼" x 1⅝", 500 packets; 70 mm unperforated, X-ray films, 240 rolls x 100 ft. Bid deadline September 8. Tender documents available from Embassy of Ceylon, 2148 Wyoming Ave., NW., Washington, D.C. Reference No. COM/TEN/72/34.

**38612 — SPAIN** — Photocopying, microfilming, blueprinting, vandyke and whiterprinting equipment. Reprografía Industrial, S.L. (importer, dist.), Elcano, 14, Bilbao (8). WTD 6/72.

**38617—SPAIN**—Photocopy paper, heat sensitive. Reprografía Industrial, S.L. (importer, dist.), Elcano, 14, Madrid (8). WTD 6/72.

### Musical instruments, parts

**39314 — SWITZERLAND** — Drums, percussion instruments, drummer outfits for jazz, entertainment bands. Mr. Franz Emmenegger, Drummer Shop (importer, retailer, drummers school), Rosslimatt, 6005 Luzern. WTD in prep.

### Toys, amusement, sporting goods

**39490—IVORY COAST**—Portable swimming pools made of stecl. Correspondence requested in French. Monsieur Hariga, Société A B I (Abidjan Industrie) (importer, dist., mfr.), Boîte Postale 343, Abidjan. WTD 6/71.

**39490—UNITED KINGDOM**—Liner type swimming pool system. Benbow Shopfitting Ltd. (mfr.), Petitor Works, Torquay, Devon. WTD in prep.

### Costume jewelry, novelties, buttons, notions

**39610—MALAWI**—Imitation jewelry, including bracelets, earrings, rings, and brooches. Samples, catalogs requested. Prices preferably in Malawi currency. Cosmetic Gift Corner (importer, retailer), P.O. Box 116, Blantyre. WTD in prep.

### Manufacturing industries

39962—BOLIVIA—Vinyl asbestos floor tile. Correspondence requested in Spanish. E.M.C.I.C. Ltda. Constructora Industrial y Comercial (importer, constructing firm), Av. 16 de Julio "Alameda" Bldg., P.O. Box 1550, La Paz. WTD 4/72.

### Antique, secondhand stores

59330—UPPER VOLTA—Used clothing, remnants. Vahgurus, Establissements, Agences et Representations (importer, dist., retailer), B.P. 546, Ouagadougou. WTD 7/72.

### Business services

73920 — NETHERLANDS — Software packages for non-industrial applications such as for utilities, language pre-processors, telecommunications and monitors, for sales in Benelux countries, Scandinavia, West Germany. Desisco Nederland N.V.; Attn: R. A. Simoons (importer, dist., information systems consultants), 414 Herengracht, Amsterdam. WTD 11/71.

## Guatemala Desires Bids For Power Line Construction

Guatemala's National Electrification Institute (Institute Nacional de Electrificacion) has opened for public bidding the construction of a 69,000-volt electrical power transmission line to be installed between the towns of Cocales, Chicacao and Mazatenango as part of a rural electrification plan. Bid deadline September 5.

Completed details, invitations for bids and bidding documents on this project (Tender No. INDE LP/14-72) may be purchased for US$25 at the following office: Instituto Nacional de Electrificacion, Departamento Administrativo, 6a. Avenida 2-73, Zona 4, Guatemala City (Ing. Joaquin Godoy O., General Manager).

## Argentina Desires Tenders For Oil Pipeline Construction

The Argentine State Petroleum Entity (YPF), Av. R. Saenz Pena 777, Buenos Aires, Argentina, invites bids for the construction of a 16-inch diameter, 390 Kilometer long oil pipeline between the Caimancito Pumping Station and the Tucuman Oil Storage Plant, in the Province of Tucuman. Bidders should itemize cost of engineering services, materials and equipment, and labor, including financing terms of the project. Conditions available for 1,000 Arg. pesos from the above-mentioned address. (About 10 Argentine pesos to US$1.) Bid deadline is September 14.

## Greece To Buy Phone Equipment

The Hellenic Telecommunications Organization has issued Tender No. 6961 for the supply of two private automatic branch exchanges with through dialing repeaters and accessories. Bid deadline September 20. Tender documents are available on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720 Room 1112, US Department of Commerce, Washington, D.C., 20230, ★(202-967-4822).

# Agencies

*Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.*

### Fruit, tree nut, vegetable farms

01730—AUSTRALIA—Almond kernels; walnut kernels; walnuts in shell. Kaftee Trading Pty. Ltd. (importer, dist., agent), 70 Park St., South Melbourne 3205. WTD 7/72.

### Meat products

20138—SWITZERLAND—Canned meats, baby foods containing meat, all kinds. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

20154—AUSTRIA—Canned poultry products in consumer, institutional sizes. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

### Canning, preserving foods

20310 — AUSTRIA — Canned, cured seafoods, including soups, ready for consumption, in consumer, institutional sizes. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20321—AUSTRIA—Canned baby foods, except meat. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20324 — AUSTRIA — Canned specialty foods not containing red meat, in consumer, institutional sizes. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20331 — AUSTRIA — Canned apricots, berries, cherries, figs, peaches, pineapple, fruit cocktails, olives, in consumer, institutional sizes. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20332 — AUSTRIA — Canned asparagus, carrots, mixed vegetables, pimientos, in consumer, institutional sizes. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20332—SWITZERLAND—Canned vegetables, mainly beans, asparagus, sweet corn, peas. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

20333—AUSTRIA—Canned mushrooms, in consumer, institutional sizes. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20334—AUSTRIA—Canned fruit juices, nectars, concentrates, in consumer, institutional sizes. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20341—AUSTRALIA—Dehydrated vegetables. Kaftee Trading Pty. Ltd. (importer, dist., agent), 70 Park St., South Melbourne 3205. WTD 7/72.

20341 —SWITZERLAND— Dried, dehydrated fruits, vegetables. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

20353 — AUSTRIA — Soy sauce, chili sauce, other meat sauces. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20371—SWITZERLAND—Frozen fruits, frozen, concentrated fruit, berry juices. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

20372 — SWITZERLAND — Frozen, packed vegetables. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

### Bakery products

20521 — AUSTRIA — Low calorie and dietetic biscuits, crackers. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20522 — AUSTRIA — Low calorie and dietetic cookies, wafers. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

### Confectionery

20716 — AUSTRIA — Salted nuts; low calorie and dietetic confectionery. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

20730 — AUSTRIA — Chewing gum, not medicated. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

### Beverage industries

20830—VENEZUELA—Barley malt for breweries. Columbus Agencies, S.A. (importer, dist., agent), Prolongación Calle Vargas No. 2, Boleíta Norte, and Apartado 61.888, Caracas. Attn: H. J. Jurgens, Mgr. WTD in prep.

### Broad woven fabric mills, cotton

22112—SURINAM—Drills, sheeting yarn (cotton) (gray goods). Requests samples and/or clear illustrations, specifications. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22113—SURINAM—Cotton print cloth yarn fabrics (gray goods). Requests samples and/or clear illustrations, specifications. N. V. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22115—SURINAM—Cotton fabrics, fine (gray goods) broad woven. Requests samples, and/or clear illustrations, specifications. Handelmaatschappij H. J. de

Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22117 — NEW ZEALAND — Downproof cambric for eiderdown covers, dyed 30" - 31" and 48" widths and printed downproof cambrics for same application in 45" - 46" finished widths. Samples, f.o.b. quotes requested. Exclusive agency. Trevor D. Dumper & Co. Ltd., Attn: Trevor D. Dumper, Mng. Dir. (importer, dist., agent), 1093 New North Rd., Mt. Albert, P.O. Box 57-063, Auckland 3. WTD in prep.

### Broad woven fabric mills, manmade fiber, silk

22211 — SURINAM — Drapery fabrics, rayon and/or acetate (gray goods). Requests samples and/or clear illustrations, specifications. N. V. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22212 — SURINAM — Taffetas, rayon and/or acetate, 100% filament rayon and/or acetate fabrics (gray goods). Requests samples and/or clear illustrations, specifications. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22213 — SURINAM — Suitings, 100% spun rayon and/or acetate (gray goods). Requests samples and/or clear illustrations, specifications. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22216—SURINAM—Taffetas, nylon or chiefly nylon (gray goods). Requests samples and/or clear illustrations, specifications. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22217—SURINAM—Silk fabrics, broad woven (gray goods). Requests samples and/or clear illustrations, specifications. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

22219—SURINAM—Silk fabricated textile products. Requests samples and/or clear illustrations, specifications. Handelmaatschappij H. J. de Vries (importer, dist., agent), Waterkant 94, P.O. Box 1849 & 1850, Paramaribo. WTD 2/72.

### Broad woven fabric mills, wool

22310 —AUSTRALIA— Fabrics suitable for men's, women's clothing. William W. Stuart & Co. (agent), 289 Flinders Lane, Melbourne, Victoria 3000. WTD 7/72.

### Textile goods

22990 — AUSTRALIA — Brown linen towels. Sanderson & Cork (importer, dist., agent), 313 Commerce House. 328 Flinders St., Melbourne, Victoria 3000. WTD 6/72.

### Women's, misses', juniors' outerwear

23352 — SWITZERLAND — Fashionable maternity dresses. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

23390—AUSTRALIA—Sporting apparel, including knitwear, socks, golf gloves, waterproofs. Bruce McClean & Co. (importer, dist., agent), 6 Athol St., Mount Waverley, Victoria 3149. WTD 2/72.

### Wood products

24994 — SOUTH AFRICA — Life preservers, cork, British Board of Trade standard; floats: Norwegian type with inserts. Marine Hardware & Machine Tool Co. (importer, retailer), 85-87 Albert Road, Woodstock, Cape Province. WTD 7/72.

### Paper mills

26211 — VIET-NAM — White standard newsprint paper; center: 7.50 cm; substance: 50/52 grs per sq. meter; toolwidth: 86/50 cm; 120/60 cm; 100/130 cm. Quotations c.i.f. and ocean freight Saigon indicated separately. Samples, descriptive literature requested. International Pacific Agency (INTERPAC) (agent), 63-65 Ham Nghi Blvd., P.O. Box 2269, Saigon. WTD 12/71.

26215 — VIET-NAM — White cigarette paper (fin verge) 20/22 grs/m2, porosity L and M 60/90—break resistance 2.85 kgs — lengthwise 1.4% — charge 25% — photovolt Opacity 72.5%. These four values minimum imperatives—extra combustibility 100% linseed and hemp. Most important characteristic aspect appreciated through transparence, paper will be well merged without impurity nor irregularity in thickness and opacitywise 16 lines per centimeter. Ashes white, adhering, regular. Smoke fresh not biting. Quotations c.i.f. and ocean freight Saigon indicated separately. Samples, descriptive literature requested. International Pacific Agency (INTERPAC) (agent), 63-65 Ham Nghi Blvd., P.O. Box 2269, Saigon. WTD 12/71.

### Paperboard mills, products

26311—AUSTRIA—Corrugated container board, liners. Walter Schenk Ges.m.b.H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. WTD 8/72.

### Converted paper, paperboard products

26413—VENEZUELA—Pressure sensitive. self-adhesive, decorative paper for shelf and drawer lining. (No plastic.) Columbus Agencies, S.A. (importer, dist., agent). Prolongación Calle Vargas No. 2, Boleíta Norte, and Apartado 61.888, Caracas. Attn: H. J. Jurgens, Mgr. WTD in prep.

26414 — AUSTRIA — Pressure sensitive tapes, labels for packaging purposes. Walter Schenk Ges.m.b.H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. WTD 8/72.

26451—AUSTRIA—Office supplies, including filing accessories, tabulating cards. Walter Schenk Ges.m.b.H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. WTD 8/72.

26472 — AUSTRIA — Sanitary tissue health products in retail packages. Dr. Hermann Schneider Import und Distribution Ges.m.b.H (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

26495 —AUSTRIA— Business machine supplies, including punch tape. Walter Schenk Ges.m.b.H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. WTD 8/72.

### Paperboard containers, boxes

26530 —AUSTRIA— Corrugated paperboard in sheets and rolls. lined and unlined. Walter Schenk Ges.m.b.H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. 8/72.

### General commercial printing

27526 —AUSTRALIA— Playing cards. Michael A. Dortheimer Pty. Ltd. (importer, dist., agent), P.O. Box 127, Prahran, Victoria 3181. WTD 6/72.

### Manifold business forms

27611—AUSTRIA—Continuous business forms, all types. Walter Schenk Ges.m.b. H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. WTD 8/72.

### Industrial chemicals

28180—UNITED KINGDOM — Wide range of industrial chemicals. Complete list available from Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Berk Ltd., Chemicals Trading Div. (importer, dist., mfr.), Berk House, P.O. Box 56, Basing View, Basingstoke, Hants. WTD in prep.

28190—AUSTRALIA—Industrial chemicals—specialty and commodity. W. F. Hamilton & Co. Pty. Ltd. (importer, dist., agent). 110 King St., Melbourne, Victoria 3000. WTD 6/72.

28190 — FRANCE — Chemical products for following industries: paint, packaging, textile, plastic films, paper. Société de Chimie et d'Entreprises (importer), 55 rue La Boétie, 750-8-Paris. WTD in prep.

### Synthetic materials

28210—AUSTRALIA—Plastics, molding materials, synthetic resins. W. F. Hamilton & Co. Pty. Ltd. (importer, dist., agent), 110 King St., Melbourne, Victoria 3000. WTD 6/72.

### Drugs

28330 —BRAZIL— Medicinal chemicals and botanical products for pharmaceutical industry. Cidifar-Kelrio S.A. Produtos Químicos e Farmaceuticos (agent), Rua da Lapa 180-sala 609, Rio de Janeiro-GB. WTD 6/72.

28332 — AUSTRALIA — Vitamins; quinines; caffeines. Kaftee Trading Pty. Ltd. (importer, dist., agent), 70 Park St., South Melbourne 3205. WTD 7/72.

28340 — HONG KONG—Pharmaceuticals. Triwo Enterprises Ltd. (importer, dist., agent), Rm. 2105, Goodhope Bldg., 612 Nathan Rd., Kowloon. Cable: CHOHOWA. WTD 1/72.

28342 —SWITZERLAND— Prescription-free pain releasing preparations for human use. G. Tettamanti & Co., Attn: Mr. T. Tettamanti (dist., mfr., agent), Stampfenbackstr. 75, 8035 Zurich. WTD 7/72.

### Soap, detergents, cleaning preparations, perfumes, cosmetics

28415—AUSTRIA — Synthetic organic detergents for household use. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

28421—AUSTRIA — Household insecticides, repellants. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

28423—AUSTRIA — Specialty cleaning, sanitation products for household, commercial use. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (im-

porter, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

28441—AUSTRIA — Shaving preparations, all types. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

28442—AUSTRIA — Perfumes, toilet waters, colognes, lower and medium price range for sale in supermarkets, department stores. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

28445—AUSTRIA — Cosmetics, toilet preparations, lower and medium price range for sale in supermarkets, department stores. Dr. Hermann Schneider Import und Distribution Ges.m.b.H. (importer, agent), Spitalgasse 1, P.O. Box 75, A-1095 Vienna. WTD in prep.

28445—HONG KONG—Cosmetics. Triwo Enterprises Ltd. (importer, dist., agent), Rm. 2105, Goodhope Bldg., 612 Nathan Rd., Kowloon. Cable CHOHOWA. WTD 1/72.

28445 —SWITZERLAND— Quality cosmetic creams, lotions for skin, body care including nutritive, lubricating, moistening preparations. G. Tettamanti & Co., Attn: Mr. T. Tettamanti (dist., mfr., agent), Stampfenbackstr. 75, 8035 Zurich. WTD 7/72.

### Nonmetallic mineral products

32932—UNITED KINGDOM — Static gaskets, dynamic seal gaskets. Neeter Drive Ltd., Attn: B. G. Oliphant-Hope (mfr.), Byfield Place, South Bersted Industrial Estate, Bognor Regis, Sussex. WTD in prep.

### Fabricated rubber products

30692—FRANCE—Rubber hoses, tubing. Sacatec (dist., mfr.), 71 rue de Voisins, 77-Claye-Souilly. WTD in prep.

30695 — FRANCE — Rubber adhesive parts. Sacatec (dist., mfr.), 71 rue de Voisins, 77-Claye-Souilly. WTD in prep.

30698—FRANCE—Rubber sheets. Sacatec (dist., mfr.), 71 rue de Voisins, 77-Claye-Souilly. WTD in prep.

### Pottery, related products

32640 —BRAZIL— Porcelain insulators. J. G. Oliveira (agent), Rua José Carlos Camargos 118, Contagem-MG. WTD 6/72.

### Steel mill products

33120—ISRAEL—Steel pipes, all sizes, ASTM spec., for oil/water/steam, to be used in power stations, oil, chemical industries. Exclusive agency. "SANTEC" Engineering Services Ltd. (importer, agent), 6 Ha'oranim St., P.O. Box 803, Kfar Shmaryahu 46910. WTD 11/71.

33127 — NEW ZEALAND — Stainless steel sheet, all gauges. Joseph Nathan & Co. Ltd., Attn: N. J. Bakes (dist., agent), P.O. Box 1792, Wellington 1. WTD in prep.

### Rolling, drawing, extruding of nonferrous metals

33523 — PAKISTAN — Aluminum foil used for cigarette industry, as inside wrappers gauge: 009 mm and 008 mm; paperbacked, bleached tissue paper of 21/22 grams in bobbins; bobbins length preferable: 1000/1500 meters. Different widths required: 61 mm, 63 mm, 88 mm, 100 mm. Requests catalogs, quotations. C & F Karachi. Ismail Dadabhoy (importer, agent), Ameejee Valleejee Bldg., Campbell St., Karachi-1. WTD in prep.

### Hand tools, general hardware

34231 — SWITZERLAND — Newly designed mechanics hand service tools, fixing, assembly tools. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

34294 —SWITZERLAND— Novelty door locks for apartments, burglar safe door locks, locksets, lock trim. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

34295—ISRAEL — Swivel casters of metal with rubber-casted metal wheels for trolleys, small and large. MPC foreign Trade Ltd. (importer, mfg., agent), 45 Bialik St., P.O. Box 451, Ramat-Gan. WTD in prep.

### Fabricated wire products

34811—TRINIDAD & TOBAGO—Wire rope. E. J. Lange & Co., Ltd. (importer, dist., agent), Lady Hailes Ave., P.O. Box 67, San Fernando, Trinidad. WTD 4/72.

34940—ISRAEL—Valves—full line, for water/oil/gas to be used in chemical/oil industries and power stations; to include pipe fittings, hangers, related products. Exclusive agency. "SANTEC" Engineering Services Ltd. (importer, agent), 6 Ha'oranim St., POB 803, Kfar Shmaryahu 46910. Cable: SANTEC KFAR-SHMARYAHU. WTD 11/71.

34940—UNITED KINGDOM—Hydraulic valves. Neeter Drive Ltd., Attn: B. G. Oliphant-Hope (mfr.), Byfield Place, South Bersted Industrial Estate, Bognor Regis, Sussex. WTD in prep.

34941 — NETHERLANDS — Solenoid-actuated regulating valves. Exclusive representations for Benelux countries, France, West Germany. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kableweg, Amsterdam. WTD 7/72.

34942 — NETHERLANDS — Pneumatic valves, related equipment. Exclusive representations for Benelux countries, France, West Germany. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

34943—FINLAND—Launching and receiving scraper traps for natural gas pipeline from Soviet Union to Finland. Sizes of pipes: diameter 700 millimeters; diameter 400 millimeters. Traps must incorporate feeding device at one end and receiving device at other end. Yrjö Laakso & Co. Oy, Attn: Mr. Yrjö Laakso, Mng. Dir. (agent), Mannerheimintie 16, 00100 Helsinki 10. WTD 3/72.

### Engines, turbines

35110—ISRAEL—Gas turbines; turbine generator sets; parts. Exclusive agency. P.T.S. Ltd. Precision Technology & Services (importer, agent, subcontracting/servicing), P.O. Box 16184, 21 Haifa Rd., Tel Aviv. Cable PRECISION TELAVIV. WTD in prep.

35190—ISRAEL—Gasoline engines, under 11 HP; diesel engines/dual fuel engines; gas engines; parts, accessories for internal combustion engines for industrial purposes. P.T.S. Ltd.—Precision Technology & Services (importer, agent, subcontractor/servicing), P.O. Box 16184, 21 Haifa Rd., Tel Aviv. Cable: PRECISION, TELAVIV. WTD in prep.

### Farm machinery

35227—JAPAN—Lawn mowers; gasoline, electric. Maple Trading Co., Ltd. (importer, agent), c/o Maruzen Bldg., 3-12 Kumade 3-chome, Yahata-ku, Kitakyushu. WTD in prep.

### Construction, mining, materials handling machinery, equipment

35319—NEW ZEALAND—Concrete sawing and concrete grooving machines, single head or multiple head for dressing & finishing work. Power operated by petrol motor and water reticulated. Equipment for use with diamond sawing blades & grinding attachments. Concrete boring & core drilling machines operated by self contained electrical motors 230v 50c single phase AND/OR 440v 50c three phase or by self contained petrol motor. Exclusive agency. Industrial & Electrical Products Div., Engine Utilities Ltd., Attn: G. John Farmer, Mng. Dir. (importer, dist., agent), 576 Great South Rd., P.O. Box 17-072, Auckland, 5. WTD 7/72.

### Metalworking machinery

35410 — ISRAEL — Milling/boring/grinding/chucking and N/C machines; lathes (engine/turret); jig borers, related accessories for metalworking industry. Exclusive agency. P.T.S. Ltd.—Precision Technology & Services (importer, agent, sub-contractors), P.O. Box 16184, 21 Haifa Rd., Tel Aviv. Cable: PRECISION TELAVIV. WTD in prep.

35418—NEW ZEALAND—Metal cutting machinery namely heavy duty high efficiency hacksaws and automatic hacksaws with capacity range up to 450mm and preferably of electro hydraulic type. Exclusive agency. Mason Industries Ltd., Attn: James J. Drewry, Development Engineer (importer, dist., mfr.), P.O. Box 1633, Auckland. WTD 1/72.

35418 — VENEZUELA — Metal cutting type machine: portable wire and steel strapping machinery for use in warehouses where storing of enormous quantities of superfluous wire strappings becomes problem and therefore machine needed with capacity to bundle, press or cut this wire. Machine should also be easy to move from one place to another within warehouse premises. Correspondence requested in Spanish. Representaciones Gines Garcia Barcelona, Attn: Mr. Gines Barcelona (importer, dist., agent), Avda Libertador, Residencias El Parque, Apartado del Este 62.240, Caracas. WTD 4/72.

35422—ISRAEL—Metalworking presses, including forging, manual presses. Exclusive agency. P.T.S. Ltd.—Precision Technology & Services (importer, agent, sub-contractor / servicing), P.O. Box 16184, 21 Haifa Rd., Tel Aviv. Cable: PRECISION TELAVIV. WTD in prep.

35452—ISRAEL — Precision measuring instruments; calipers / micrometers; height gages; bevel protractors; wires for thread measuring; blocks/stands dial indicators; lineal gaging equipment; automatic measuring equipment for multi-dimension measurings; other related accessories for metalworking industry. Exclusive agency. P.T.S. Ltd.—Precision Technology & Services (importer, agent, subcontractor/servicing), P.O. Box 16184, 21 Haifa Rd., Tel Aviv. Cable: PRECISION TELAVIV. WTD in prep.

35482—AUSTRALIA—Hand and power driven tools. A. B. Wilson Proprietary

Ltd. (importer, dist., agent), P.O. Box 14, Salisbury North Q. 4107. WTD 6/72.

**35482—JAPAN**—Hand tools for home, garden use. Maple Trading Co., Ltd. (importer, agent), c/o Maruzen Bldg., 3-12 Kumade 3-chome, Yahata-ku, Kitakyushu City. WTD in prep.

### Special industry machinery

**35510—VENEZUELA** — Bottling, filling and packaging machinery for beverage, food, pharmaceutical industries. Columbus Agencies, S.A., Attn: H. J. Jurgens, Mgr. (importer, dist., agent), Prolongación Calle Vargas No. 2, Boleíta Norte and Apartado 61.888, Caracas. WTD in prep.

**35513—GERMANY**—Machinery for candy industry. Zuckerhandelsunion GmbH (importer, dist.), 42a-44a Hohenzollerndamm, 1 Berlin 31. WTD 6/72.

**35513—IRAN**—Meat and poultry packing machinery, including parts, attachments. Canning and packing machinery for fruits, vegetables, including parts, attachments. Exclusive agency. Rassoulzadeh, Mahmoud (importer, dist., agent), West Takhte-Jamshid, Char-Rahe Fariman, Majid Bldg., Tehran. WTD in prep.

**35513 — SWITZERLAND** — Meat-, poultry-packing plant machinery, equipment, fruit, vegetable canning, packing machinery. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

### General industrial machinery

**35610—NETHERLANDS** — Compressors (capacity 0-500 M3/hr, pressure 0-8 ATM) and roots blowers 0-20,000 M3/hr, 8 meters water column). Rollo N. V. (importer/agent), Alexanderstraat 10, The Hague. WTD in prep.

**35612—UNITED KINGDOM**—Hydraulic pumps. Neeter Drive Ltd., Attn: B. G. Oliphant-Hope (mfr.), Byfield Place, South Bersted Industrial Estate, Bognor Regis, Sussex. WTD in prep.

**35642 — GERMANY** — Dust collection equipment for industrial plants. Franz Winterfeld GmbH (mfr.), 12-20 Germaniastrasse, 1 Berlin 42. WTD 6/72.

**35642—ISRAEL** — Pollution control/air purification equipment; dust collection equipment; air washers, other related equipment, accessories for industrial gas cleaning systems. Exclusive agency. P.T.S. Ltd. Precision Technology & Services (importer, agent, subcontracting/servicing), P.O. Box 16184, 21 Haifa Rd., Tel Aviv. Cable: PRECISION TELAVIV. WTD in prep.

**35690—FINLAND**—Vertical filter separators for natural gas pipeline from Soviet Union to Finland. Quantity of gas 85,000 normal cubic meter per hr. Nominal pressure DIN ND 64; highest working pressure 55 ATY. Yrjö Laakso & Co. Oy, Attn: Mr. Yrjö Laakso, Mng. Dir. (agent), Mannerheimintie 16, 00100 Helsinki 10. WTD 3/72.

**35690 — FRANCE** — Compressed air de-oilers. Ateliers de Vigneseuil (dist., mfr., exporter), Chemin Pavé, 95 - Bernes-sur-Oise. WTD 11/71.

**35690—JAPAN**—All types of industrial machinery, equipment, supplies. Inoueki Co., Ltd. (importer, dist.), 1-101 Kamigofuku-machi, Hakata-ku, Fukuoka City. WTD in prep.

**35690 — SWITZERLAND** — Machinery, equipment and apparatus for treatment of water, waste, coolants, oils, other industrial liquids in metalworking, steel, mechanical industries. ISI International SA, Attn: Mr. G. Zwicky, Pres. (dist., mfr., agent), 10 Chemin de Verey, 1208 Grange-Canal (Geneva). WTD 3/72.

**35690 — VENEZUELA** — Fast automatic baling presses of bags used in transportation of cement, flour, animal feed, etc. Correspondence requested in Spanish. Representaciones Gines Garcia Barcelona, Attn: Mr. Gines Barcelona, Pres. (importer, dist., agent), Avda Libertador, Residencias El Parque, Apartado del Este 62.240, Caracas. WTD 4/72.

### Office machines

**35731—FRANCE**—Pocket size electronic calculators, digital type, operating on battery. Editions François Beauval (dist., mfr), 60, rue Saint-André des Arts, Paris 6. WTD 5/72.

**35731—FRANCE**—Small computers for office use. Société Miollis (importer, agent), 12, rue Cépré, Paris 15. WTD 2/72.

**35731—SWEDEN**—Medical EDP equipment for acquisition, processing and presentation of physiological patient information (not administrative information); hardware as well as software. Saven Elektromedicin AB (importer, dist., agent), Strandgatan 3, S-185 00 Vaxholm. WTD in prep.

**35733 — NETHERLANDS** — Computer peripheral equipment. Exclusive representations for Benelux countries, France, West Germany. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

**35741—AUSTRIA**—Computing and accounting machines; cash registers. Herbert Fiala g.m.b.H. & Co., KG (dist., agent, repairer), Mariahilferstrasse 99, P.O. Box 116, A-1072 Vienna. WTD 3/72.

**35741—FRANCE**—Calculating, accounting machines. Société Miollis (importer, agent), 12, rue Cépré, Paris 15. WTD 2/72.

**35791 — AUSTRIA** — Addressing, dictating, duplicating; related office machines. Herbert Fiala G.m.b.H. & Co. KG (dist., agent, repairer), Mariahilferstrasse 99, P.O. Box 116, A-1072 Vienna. WTD 3/72.

### Service industry machines

**35851—JAPAN**—Air conditioners for industrial and home use; related equipment. Asahi Keiki Seibi K.K. (dist., mfr.), 19-17 Tamachi, Kokura-ku, Kitakyushu. WTD in prep.

**35852—UNITED KINGDOM**—Household air conditioners, dehumidifiers. P.P.C. Electrical (North Wales) Ltd. (dist., mfr., exporter), Marine Road East, Prestatyn, Flintshire, North Wales. WTD in prep.

**35857 — FRANCE** — Dehumidifiers. Ateliers de Vigneseuil (dist., mfr., exporter), Chemis Pavé, 95 - Bernes-sur-Oise. WTD 11/71.

**35892 — UNITED KINGDOM** — Waste compactor, industrial, also capable of taking glass bottles; metal shredder. Malthouse Hunter Ltd. (importer, dist., retailer), York House, 3 Poole Rd., Bournemouth, Hampshire. WTD in prep.

### Electric transmission, distribution

**36112 — NETHERLANDS** — Microwave test equipment; other electrical testing equipment. Exclusive representations for Benelux countries, West Germany, France. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

### Electrical industrial apparatus

**36210 — ISRAEL** — Diesel/gas turbine-driven generators/generating sets to be used as stand-by for industries, communities. Exclusive agency. "SANTEC"-Engineering Services Ltd. (importer, agent), 6 Ha'oranim St., P.O. Box 803, Kfar Shmaryahu 46910. Cable: SANTEC KFARSHMARYAHU. WTD 11/71.

**36210 — SWITZERLAND** — Miniature, high-speed stepping motors for digital motions. Dumaco AG, Attn: G. Manta, Dir. (dist., mfr.), Elfenaustrasse 3, 2500 Biel. WTD 3/72.

**36220 — JAPAN** — Thermostatic controls for heating, air conditioning units. Asahi Keiki Seibi K.K. (dist., mfr.), 19-17 Tamachi, Kokura-ku, Kitakyushu City. WTD in prep.

**36220 — NETHERLANDS** — Industrial controls. Exclusive representations for Benelux countries; France, West Germany. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

### Household appliances

**36311 — SWITZERLAND** — Household microwave ovens. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

**36344 — NETHERLANDS** — Controls for household electrical devices. Exclusive representations for Benelux countries; France, West Germany. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

### Radio, television receiving sets

**36510 — AUSTRALIA** — Clock radios — clock only in cabinet, no electronics; 240 volt 50 cycle. Cassette tape transports, no electronics; 240 volt 50 cycle or DC operation. Bulk magnetic tape for C-60, C-90 cassettes. International Music Industries (importer, agent), c/o Mr. N. Coleman, P.O. Box 129, Ferntree Gully, Victoria 3156. WTD 2/72.

**36510—ISRAEL** — Television receiving sets; cassette recorders (electrical or battery-operated) to include portable sets; for schoolroom, external studies. Evening University for External Studies, P.O. Box 11030, Tel Aviv. Attn: Mrs. S. Lachman, Principal.

**36510—SPAIN**—Hi-fi amplifiers, loudspeakers, microphones. Proyección y Sonido, S.A. (importer, dist., agent), Ronda General Mitre, 174-176. WTD 7/72.

**36520—ISRAEL**—Video tapes adaptable to television sets for schoolroom studies, general use. Evening University for External Studies, P.O. Box 11030, Tel Aviv. Attn: Mrs. S. Lachman, Principal.

### Communications equipment

**36620 — SWITZERLAND** — Laser metal surface treatment equipment, welding and drilling machines, related auxiliary equipment, accessories and parts. Laser optiques made from glass, ruby, yag, $CO_2$ and TEA lasers. Lasr Techniques SA, Attn: Mr. Remund (dist., mfr.), Mühleweg 13, 3294 Bueren. WTD 7/72.

**36621 — NETHERLANDS** — Commercial

& industrial communication equipment; optical scanners. Exclusive representations for Benelux countries; West Germany; France. Geveke Elektronica & Automatie N.V.,; attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

**36623—IRAN**—Alarm and signal systems, electric and electronic. Auto-Nour Co. (importer, dist., agent), Eisenhower Ave., Jeyhoun St., Tehran. WTD 3/71.

**36623—IRAN**—Alarm and signal systems, electric and electronic. Guide Co. Ltd. (importer, dist., agent), 102 Sepahbod Zahedi Ave., Tehran. WTD 9/71.

**36623 — SWITZERLAND** — Burglar alarms for villas, apartments, microwave intruder detector transceivers, ultrasonic security alarms, low voltage doorway control systems. Seprocom AG (importer, agent), Baarerstrasse 57, 6300 Zug. WTD in prep.

**36624 — NETHERLANDS** — Electronic navigational aids. Exclusive representations for Benelux countries; West Germany; France. Geveke Elektronica & Automatie N.V.; attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

**36626 — NETHERLANDS** — Electronic teaching machines & teaching aids; electronic industrial, commercial and scientific equipment and systems. Exclusive representations for Benelux countries; West Germany; France. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

**36629—NETHERLANDS**—Microwave & mobile telephone (communication) equipment. Exclusive representations for Benelux countries; West Germany; France. Geveke Elektronica & Automatie N.V.; Attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

### Electronic components, accessories

**36740—GERMANY** — Devices, apparatuses, and equipment for fuel cells (atomic energy, nuclear power); materials, equipment for nuclear research. Correspondence requested in German. Klaus D. Weber (mfr., agent), D-7530 Pforzheim, P.O.B. 2020. WTD 5/72.

**36790—AUSTRALIA**—Electronic equipment, components. W. G. Booth Pty. Ltd. (importer, mfr., agent), 511 Church St., Richmond, Victoria 3121. WTD 2/72.

**36795 — NETHERLANDS** — Electronic components & accessories. Exclusive representations for Benelux countries; France; West Germany. Geveke Elektronica & Automatie N.V.; attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

### Electrical machinery, equipment

**36930 —AUSTRALIA**— Electro medical equipment. Electro Medical Engineering Pty. Ltd. (importer, dist., consulting), 75 Canterbury Road, Canterbury, Victoria 3126. WTD 2/72.

**36930—SWEDEN**—Pace-makers by new-to-market manufacturers. Saven Elektromedicin AB (importer, dist., agent), Strandgatan 3, S-185 00 Vaxholm. WTD in prep.

### Motor vehicles, equipment

**37141 — UNITED KINGDOM** — Power transmissions including gearboxes, couplings, clutches, shafting and pulleys. Neeter Drive Ltd., Attn: B. G. Oliphant-Hope (mfr.), Byfield Place, South Bersted Industrial Estate, Bognor Regis, Sussex. WTD in prep.

### Engineering, laboratory, scientific, research instruments

**38111 —NETHERLANDS**— Nautical instruments. Exclusive representations for Benelux countries; West Germany; France. Geveke Elektronica & Automatie N.V.; attn: Mr. Klip (importer, dist., agent), 25 Kabelweg, Amsterdam. WTD 7/72.

**38112—FRANCE** — Portable magnetic recorders, 7 tracks, for use in laboratories with measuring instrumentation, price range $4000 to $4500. Bureau de Liaison (importer, dist., agent), 113, rue de l'Université, Paris 7. WTD 0/71.

### Instruments for measuring, indicating, controlling physical characteristics

**38213 — SWITZERLAND** — Industrial process instruments for automated processes on machine tools and high precision machinery of advanced nature only. Requests offers from manufacturers. Dumaco AG, Attn: Mr. G. Manta, Dir. (dist., mfr.), Elfenaustrasse 3, 2500 Biel. WTD 3/72.

### Surgical, medical, dental instruments

**38410—BRAZIL**—Surgical, medical instruments. Servo Ius Ltda Assessores (agent), Rua do Ouvidor 130 sala 714, Rio de Janeiro-GB. WTD 6/72.

**38410—SWEDEN**—Fibre light sources (generators) for endoscopes. Saven Elektromedicin AB (importer, dist., agent), Strandgatan 3, S-185 00 Vaxholm. WTD in prep.

**38420 — BRAZIL** — Surgical appliances. Servo Ius Ltda. Assessores (agent), Rua do Ouvidor 130-sala 714, Rio de Janeiro-GB. WTD 6/72.

**38421—AUSTRALIA**—Disposable surgical supplies. Electro Medical Engineering Pty. Ltd. (importer, dist., consulting), 75 Canterbury Road, Canterbury, Victoria 3126. WTD 2/72.

**38421 —NETHERLANDS**— Medical and surgical disposables, procedure packs, textile replacement products, laboratory disposables, dispensing systems, tubing and catheters, organic implants. Purchase on own account on exclusive basis for western Europe. Blom N.V., Attn: J. F. Blom, mng. dir. (importer, dist./exporter, agent), 2 Brabantplein, or P.O. Box 48, Uden. WTD 8/72.

**38430—SWITZERLAND**—Dental professional equipment, chairs, equipment units, cabinets, dental laboratory equipment. Seprocom AG (importer, agent), Baarerstr. 57, 6300 Zug. WTD in prep.

### Photographic equipment, supplies

**38610 — AUSTRALIA** — Audio visual equipment—language training or teaching equipment; motion picture or film strip material (for hire or sale to industry, commerce or schools); audio visual safety. management, sales or general educational products or programs. Projectorvision Pty. Ltd. (retailer, hire, service, maintenance), 230 Albert Rd., South Melbourne 3205. WTD 7/72.

**38611—ISRAEL**—Projectors for filmstrips/slides including combination slide and strip for schoolroom, general use. Evening University for External Studies, P.O. Box 11030, Tel Aviv. Attn: Mrs. S. Lachman, Principal.

### Watches, clocks, parts

**38711 — BRAZIL** — Timing mechanism, for industrial automation and control. Eletro Representaçoes Ltda. (agent), Av. Graça Aranha 174-sala 1405, Rio de Janeiro-GB. WTD 6/72.

### Toys, amusement, sporting goods

**39490 —AUSTRALIA**— Sporting goods, particularly golf equipment, accessories. Bruce McClean & Co. (importer, dist., agent), 6 Athol St., Mt. Waverley, Victoria 3149. WTD 2/72.

**39492—JAPAN**—Golf clubs, balls. Agent for Western Japan. Teramoto Shoji, Ltd. (importer, dist., agent), 10-7 Kyomachi 3-chome, Kokura-ku, Kitakyushu City. WTD in prep.

### Pens, pencils, office, artists' items

**39522 — AUSTRALIA** — Art and craft materials; fashion boards. Michael A. Dortheimer Pty. Ltd. (importer, dist., agent), P.O. Box 127 Prahran, Victoria 3181. WTD 6/72.

**39530 — AUSTRIA** — Marking devices; price marking equipment for pressure sensitive tape. Walter Schenk Ges.m.b.H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. WTD 8/72.

**39550 — AUSTRIA** — One time carbon paper in rolls, sheets. Walter Schenk Ges.m.b.H. & Co. KG (importer, agent), Glasauergasse 15, P.O. Box 13, A-1133 Vienna. WTD 8/72.

### Manufacturing industries

**39931—SWEDEN**—Luminous tubing and bulb advertising signs, travelling message signs, message change signs for automobiles, electronic devices for advertising signs and displays, illuminating devices to achieve special effects. Nord-Agentur, T. Nordelöf (importer, agent), Box 11022, S-720 11 Vasteras. WTD 6/72.

## Guatemala To Prequalify Firms For Bridge Construction Bids

Guatemala's National Bureau of Highways (Direccion General de Caminos) has issued an invitation for construction companies to prequalify to participate in the construction bid for the "Incienso Bridge," which will connect Guatemala City's zones 3 and 7.

For the prequalifying documents, write: Direccion General de Caminos, Seccion de Especificaciones, Departamento de Estudios Tecnicos, Finca La Aurora, Zona 13, Guatemala City, Guatemala, Attn: Ing. Enrique Ramirez B., President. Prequalifying documentation should be submitted to the above address 20 days before the project bid deadline, which is as yet not fixed. Firms should have wide experience in this type of construction.

## Greece To Buy TV Equipment

The General Directorate of Procurement has issued Tender No. 790172 for the supply of four (4) portable TV radio links. Bid deadline September 20. Tender documents are available on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 1112 U.S. Dept. of Commerce, Washington, D.C., 20230, ★(202-967-4822).

# Visiting Buyers And Officials

**ARGENTINA** — Noe Nicolas Mattano and Rafael A. Hasson, Agua y Energia Electrica, Lavalle 1554, Piso 3, Buenos Aires, Argentina, interested in **water and electric power.** September 28 via Los Angeles for two weeks. c/o Mr. Noe N. Mattano, c/o Argentine Consulate, Los Angeles. Itinerary: Los Angeles, St. Louis, Philadelphia, Norristown, Pa., Centralia, Mo., New York. WTD not required.

**AUSTRALIA** — Harry C. Linton, The Victorian Chamber of Manufactures, 370 St. Kilda Road, Melbourne 3004, interested in meeting with West Coast companies relative to **agricultural methods, automotive and marine accessories, outdoor living products, plumbers' and builders' hardware, kitchen utensils, fire, safety and security systems, pollution equipment, tooling for manufacturing, especially hot pressure, die casting of zinc and aluminum, furniture designs, fiberglass and plastic products.** The Victorian Chamber of Manufactures is an employers' and manufacturers' organization which services more than 240 industry sections and associations. September 1 via Honolulu for 1 month c/o Australian Consulate General, Crocker Plaza, San Francisco, Calif. Itinerary: Honolulu, Los Angeles, San Diego, Las Vegas, Los Angeles, San Francisco, Portland, Seattle, Los Angeles.

**BRAZIL**—Ivo Cinti, Rua Conde de Bonfim 251 s/403, Rio de Janeiro, interested in export, import, agency and marketing research of **industrial chemical, paper and graphic arts engineering** and representations. September 5 via O'Hare Airport, Chicago for 15 days. c/o New York Hilton Hotel, 1335 Ave. of the Americas, New York, N.Y. 10019. Itinerary: Chicago, New York. WTD in preparation.

**DENMARK** — Werner Kruse, Export Manager, Bing & Grondahl Porcelaenfabrik, 149 Vesterbrogade, DK-1502 Copenhagen V., interested in market research preparatory to establishing own **U.S. sales subsidiary dealing in Danish china, porcelain figurines,** etc. Via Boston, Aug. 1, for approximately three months. c/o Park-Sheraton Hotel, 7th Ave. & 56th St., New York, N.Y. 10019. Itinerary: Boston, Philadelphia, Chicago, New York and San Francisco. WTD in preparation.

**ISRAEL**—Joseph Wild, engineer, Concepts Ltd., 6 Kikar Malhei, Israel, Tel Aviv, interested in finding a publisher/printer for handling the **printing/publishing/distribution and possibly joint funding of a Guide Book** on Israel (with military emphasis). Via New York to Atlanta, July 27 to August 31. c/o 920 Kings Court, NE, Atlanta, Georgia 30306 (404-875-2419.) Itinerary: Open for Department's suggestions. WTD has been initiated.

**ISRAEL** — Aharon Paul, Aharon Paul Ltd., 2 Even Israel, Jerusalem, agents for Phillips in Jerusalem, interested in **import agency.** Via New York, August 3 for approximately one month. c/o Mr. Leo Schwerd, 135-16 73rd Terrace, Kew Garden Hills, New York 11367. Itinerary: New York, Detroit, San Francisco, Los Angeles, Las Vegas, Washington, New York. WTD pending.

**ISRAEL** — Alexander Tenenbaum, Tene, Ltd., 10 Rogosin St., Ashdod, interested in finding suitable company to press **one million records** to mark Israel's 25th Anniversary. Text will be supplied by the inquirer together with a picture which should be printed on the face of each record, requesting technical information. Via New York Airport. August 3 for one month. c/o D. C. Kahane, 67-30 Dortmouth St., Forest Hills, Queens, N.Y. 11375. Itinerary: New York area only. WTD has been initiated.

**JAPAN**—Shiro Kani and Minoru Yamada, Shinnichi Industries, Inc., Kariya City, Aichi Prefecture, Japan, interested in importing **machine tools, labor-saving equipment for industrial machinery, sporting goods and pollution control equipment.** Via San Francisco, August 10, for 25 days. c/o Catalytic Products International, Inc., 344 Mill Valley, Palatine, Illinois. Itinerary: San Francisco, Los Angeles, Chicago, Detroit, New York, Baltimore and Washington, D.C. WTD in preparation.

**LEBANON**—Ibrahim Mohamed Khourdaji, P.O. Box 7594, Beirut, interested in purchasing U.S. **machines for producing luggage.** Also ready to discuss with interested firms joint venture possibilities for manufacture in Lebanon or Syria, requesting technical information. Via Boston early August for at least one month. c/o American Tourister, Warren, Rhode Island. Itinerary: Boston, Warren, R.I., New York, Chicago, Washington, D.C. WTD July 1972.

**NEW ZEALAND**—Peter W. Hyam, General Mgr., Bowater Mouldings & Dowels, Ltd., P.O. Box 16-042, Hornby, Christchurch, New Zealand, interested in **exporting wooden molding and dowels, purchasing machinery for manufacture of molding and furniture turnery.** Mid-August via San Francisco for one month. Itinerary: San Francisco, Dallas, Warren, Ark.; Orlando, Atlanta, Farmington, N.H., Vancouver, B.C. Mailing address: U.S. Department of Commerce Atlanta Field Office, 1401 Peachtree St., N.E., Atlanta, Georgia 30309. WTD 11/70.

**NEW ZEALAND** — G. John Farmer, Managing Director, Engine Utilities, Ltd., 576 Great South Road, Auckland 5, New Zealand, interested in agencies in New Zealand for United States manufacturers of **concrete sawing and grooving machines, concrete boring and core drilling machines, electrical hoisting and materials handling equipment.** Via New York August 28 for 18 days. c/o Royal Manhattan Hotel, 70 8th Ave., New York, N.Y. 10011, Aug. 28-31; c/o Gene Mackey, Export Mgr., Tecumseh Products Co., Tecumseh, Mich. 49284, Sept. 1-9. Itinerary: New York, Tecumseh, San Francisco, Los Angeles. WTD 7/72.

**PAKISTAN**—Mirza Khalil Ahmed, Al-Queresh Industries, 3 Lodge Road, Old Anarkali, Lahore, Pakistan, interested in exporting **handicrafts.** Via Los Angeles, third week of September for six months. c/o Mark Twain Hotel, Hollywood, Calif. Itinerary: Los Angeles. WTD under preparation.

**SWITZERLAND** — Henri Demieville, President Digit Sa, Petite Corniche 7, 1095 Lutry, interested in purchasing the finest samples of U.S. **recreational vehicles and related equipment,** will distribute and promote them in Switzerland and Europe; will manufacture under license in Switzerland, requesting technical information. Via Chicago, early October for six months. c/o Henri N. Demieville, 1174 W. Perkins Rd., Memphis, Tenn. 38117. Itinerary: Chicago, Elkhart, Ind., Tennessee, Florida, Texas, Arizona, San Diego, Los Angeles, San Francisco, and back to East Coast. WTD 2/72.

## Austrian Firm Wants Cement For Shipment To Africa

An Austrian firm, Gesellschaft fuer Industriebedarg Egon Sauer-Nordendorf OHG, of Waldburgergasse 64, A-5026 Salzburg (telegram address: Sauer Salzburg; telex no. 06/3602), requests c.i.f. Gulf of Guinea Harbor (west Africa) quotation for 100,000 tons of cement, type B.B.S. 12/58. Unloading will be via barges. First shipment is to arrive this September.

A World Trade Directory Report on this firm (#6759, December 1971) is available for $2 from the Export Information and Services Division, BIC-976, U.S. Dept. of Commerce, Washington, D. C. 20230.

## Fiji Desires Microwave System

The Dept. of Posts and Telecommunications has issued Tender No. 2410 for the supply of a microwave system. The Government of Fiji has applied for a loan from the International Bank for Reconstruction and Development and proceeds of this loan will be applied to payments under a contract resulting from this invitation to bid. Copies of tender announcement and specifications are available only from Messrs. Preece, Cardew, and Rider, Consulting Engineers Paston House 165-167, Preston Road, Brighton BN1 6AF, Sussex, England (one pound per set).

## Future Construction Abroad Summary Available

A quarterly summary of future construction projects abroad, contract award stories and significant foreign government tenders published in *Commerce Today* and *Commerce Business Daily* during April, May and June is available to U.S. firms from the Informational Services Division, BDC-584, Rm 4813, U.S. Department of Commerce, Washington, D.C. 20230. A preaddressed mailing label should be included with the request. The summary, which may also be reviewed at any of the 42 Commerce Field Offices, alphabetically lists project summaries by country in five distinct classes: airport, seaport, railroad and highway projects; hydro and thermal electric plant and irrigation projects; hospital, hotel and housing projects; industrial plant projects; and comprehensive development projects. Whenever possible, names of contractors and responsible agencies are cited, as well as original publication dates.

A limited number of copies of the first quarter 1972 summary is also available upon request.

# Future Construction Abroad

TURKEY — Istanbul Fertiliser Corp.-IGSAS (Istanbul Gubre Sanayii Anonim Sirketi) in which Turkish Petroleum Corp. (TPAO) is a major shareholder is calling for prequalification by firms interested in acting as prime contractor or ammonia and urea process vendors for a **plant to be erected at Izmit to process 750 metric tons ammonia and 830 metric tons of urea daily.** A $24 million World Bank loan covering the major portion of the external financing requirement has reportedly been completed. U.S. firms interested in receiving prequalification documents as prime contractor or as ammonia and urea process vendors are requested to apply in English to IGSAS General Management, P.O. Box 132, Izmit, Turkey. Request for documents must be submitted no later than September 30. A call for prequalification of machinery and equipment suppliers will be issued later.

TANZANIA—Ministry of Communications and Works has issued prequalification for contractors to tender for upgrading of the Mtwara-Mingoyo-Masasi Road in southern Tanzania. The project includes reshaping existing gravel road which is to serve as a sub-base for base and surfacing, new surface drainage, resurfacing the road and constructing a 34-meter-long continuous slab reinforced concrete bridge. Tender documents to be issued in October and construction to start in April. Period allowed for bid preparation and site investigation is about three months. U.S. contractors interested in bidding should apply for prequalification forms to: Chief Quantity Surveyor and Contracts Officer, Ministry of Communications and Works. P.O. Box 104, Dar-es-Salaam. Completed forms to be returned by August 18, though grace of 30 days definitely anticipated.

PHILIPPINES—The Philippine Bureau of Public Works (BPW) invites firms to prequalify to bid on the construction of the Philippine **Fisheries Port Project** at Navotas, Rizal. Applications should include the following: General description of applicant firm. Particulars of technical capacity of firm, including total value of contract works completed during past five years; previous and on-going works similar nature (title of project. location, names and addresses of employer and engineer, contract value, details of works. whether executed as main contractor or sub-contractor; copies of certificates or letters of invitation, if available, relative to works mentioned); details of major construction plant owned and likely to be used, including present location; number of technical and non-technical personnel presently employed by contractor and qualifications and experience of key personnel and of those proposed for projects. Detailed financial statements for past two years certified by licensed accountant (assets liabilities, net worth, available credit resource, bank references with letter attached, bonding or surety companies and foreign interests in assets of firm). Where applicant is composed of two or more firms in joint venture or where subcontractors are proposed to be employed for any major portion of works, similar particulars as listed above shall be provided for each individual firm. In case of joint venture, one firm shall be named as managing partner and particulars of proposed participation of each firm shall be stated.

Applications must be in English and submitted in four signed copies in sealed envelopes plainly marked "Prequalifications-BPW-Civial Works Contractor-Philippine Fisheries Port Project" and addressed to: Director, Bureau of Public Works. Bonifacio Dr., Port Area, Manila, Philippines, no later than September 5. The Asian Development Bank (ADB) will finance the foreign exchange cost of this project.

## Algeria Invites Proposals To Design Furniture Plant

The Algerian Government has issued an invitation for bids calling for **the design of a furniture factory.** Interested firms should propose the following: (1) preliminary studies for the design and start-up of the plant, (2) construction of the plant, (3) operation of the plant until its turn-over to the purchaser, (4) assistance of the bidder in the management of the plant and the training of personnel. The agency to be contacted is: Direction Nationale des Cooperatives de L'A.N.P. (DNC/ANP), Commission des Marches, 25, rue Negrier, Hussein-Dey, Algiers, Algeria. The envelope should be marked "Ne pas ouvrir—Soumission complexe bois."

Bid deadline is September 1. A copy of the bid dossier in French is available for review in the office of the Construction, Water Resources and Engineering Division, Rm. 2119, U.S. Department of Commerce, Washington, D.C. 20230.

## Canadian Province Asks Bids To Construct Power Plant

Tenders are invited for construction of the Mica Powerplant on the Columbia River in British Columbia. The Project includes the powerhouse, draft tubes, tailrace tunnels, transformer chambers, penstocks, elevator and high voltage lead shafts and other underground works, excavation for the terminal yard and tourist building, construction of access roads and embankments, installation of mechanical and electrical equipment, provision of temporary services and construction of miscellaneous other works. Bid deadline September 26.

Copies of the tender documents (Tender No. CM-704-CQ 6502) may be obtained from the British Columbia Hydro and Power Authority, 970 Burrard St., Vancouver 1, B. C. upon payment of $105 for the first copy and $52.50 for each additional copy.

## Tunisia Plans to Build Cement Plant At Gabes

El Bouniane, a holding company 51 percent controlled by the Government of Tunisia with 13 subsidiaries and 14 plants in various sectors of the Tunisian economy, plans to construct a 1,000-ton-per-day cement plant at Gabes, 400 kilometers south of Tunia. The tender includes a lithological study of the Djebel Sidi Salah mountains near Gabes, from which calcium is to be extracted. The purpose of this tender is primarily to determine the total cost of the project. Once this is known, El Bouniane will seek financing from foreign banks; the rest will be contributed by the Tunisian Government.

Submissions are to be made by August 30. Interested firms should inform Societe El Bouniane (68 Ave. Farhat Hached, Tunis) as soon as possible of their intention to submit. Tender documents are available for 100 Tunisian dinars ($48.36). Correspondence is preferred in French. The Embassy states that El Bouniane is considered most reliable and could be recommended to American firms.

## Malaysia Asks Prequalification On Reconstruction Of Highway

The Director-General of Public Works, West Malaysia invites contractors to prequalify to bid on the reconstruction of the Federal highway between Kuala Lumpur and Petaling Jaya which is about 7 miles in length. The work involves extensive earthmoving, drainage, paving and structural works, street lighting, and traffic signs and signals. Construction is expected to start around May 1973. Estimated cost of project about $31.6 million.

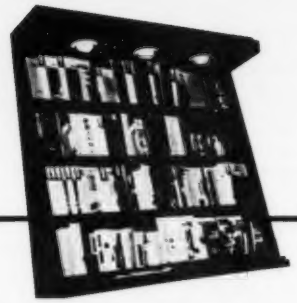
Only firms prepared to undertake complete project will be prequalified. The deadline for prequalification is September 18. Write: Director General of Public Works, Maxwell Rd., Kuala Lumpur, Malaysia or Freeman Fox & Partners, 25 Victoria St., London, S.W.1, England. Some additional details of the project and prequalification instructions are available from the Construction, Water Resources & Eng. Div., BDC-742, U.S. Dept. of Commerce, Washington, D.C., 20230, ★(202-967-3602).

## Mexico To Register Contractors In Bidding For Storage Dam

The Secretariat of Hydraulic Resources has called for registration of contractors from member countries of the Inter-American Development Bank who are interested in bidding on the construction of a storage dam in the State of Jalisco. Contractors who have previously registered with the Secretariat of Hydraulic Resources are considered registered for purposes of bidding on this project.

The project, Convocatoria P.I.-72-22, Storage Dam, "El Marijo," calls for construction works consisting of the following: excavation, 50,360 cubic meters; rock fill, 27,140 cubic meters; waterproofing material, 153,820 cubic meters; masonry, 690 cubic meters; and concrete, 250 cubic meters.

Contractors interested in participating can obtain specifications from Direccion General de Obras de Riego para Desarollo Rural, Direccion de Construccion, Departmento de Contratos y Adquisiciones, Paseo de la Reforma No. 69, Piso Septimo, Mexico, D. F. Contractors must register with the Oficina de Registro e Informacion, Secretaria de Recursos Hidraulicos, Antonio Caso No. 19-5 Pisos, Mexico, D. F.



# New Publications

*When ordering any publications, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.*

## DOMESTIC AND INTERNATIONAL BUSINESS

### BUREAU OF DOMESTIC COMMERCE

**Chemicals.** Quarterly industry report. December 1971/March 1972. Vol. 18, No. 4 and Vol. 19, No. 1. Annual subscription $1.50 (50¢ more for foreign mailing). Single copy 40¢.

**Data communications**—market information sources. July 1972. 60pp. 60¢.

### BUREAU OF INTERNATIONAL COMMERCE

**Export control bulletin**—supplement to Export control regulations (ECB-OEC-67). Subject: Exports of cattlehides. 40¢.

#### International Marketing Information Service

*World Markets for U.S. Exports*

**Industrial and scientific instruments—Argentina** (IMIS 72-214). 12pp. 10¢.

**Industrial and scientific instruments—Hong Kong** (IMIS 72-218). 12pp. 10¢.

**Air-conditioning and refrigeration equipment—Brazil** (IMIS 72-220). 16pp. 10¢.

**Air-conditioning and refrigeration equipment—Germany** (IMIS 72-225). 12pp. 10¢.

#### Foreign Economic Trends

Annual subscription $15 ($6 more for foreign mailing). Single copy 10¢.

**Ireland** (ET 72-065). 8pp.

**South Africa** (ET 72-066). 12pp.

#### Overseas Business Reports

Annual subscription $16 ($5 more for foreign mailing). Single copy 15¢.

**Foreign trade regulations of the Dominican Republic** (OBR 72-022). 8pp.

**The use of market share reports—country report on Federal Republic of Germany** (OBR 72-025).

**Selling in Switzerland** (OBR 72-028). 16pp.

## SOCIAL AND ECONOMIC STATISTICS ADM.

### BUREAU OF ECONOMIC ANALYSIS

**Business conditions digest.** Series ES1 No. 72-7. Data through June. Annual subscription including supplement $15 ($3.75 more for foreign mailing). Single copy $1.50.

**Defense indicators.** Series ES4 No. 72-7. Annual subscription $3.50 ($1 more for foreign mailing). Single copy 35¢.

## BUREAU OF THE CENSUS

### Agriculture

*1969 Census of Agriculture Area Reports*

A separate report is published for each State, American Samoa, Guam, Puerto Rico, Trust Territory, and the Virgin Islands. The report consists of two sections. Section 1 contains the introductions, State summary data, county summary of selected data, miscellaneous items by counties (crops or livestock appearing in relatively few counties and therefore not listed in the county tables on a nationwide basis), and an appendix giving explanations, definitions, and examples of the report forms used. Section 2 contains the detailed county reports.

**Alabama** (Vol. 1, part 32, 366 pp. $2.75 (paper). Section 1. Summary data).

**Alabama** (Vol. 1, part 32, Section 2. County data). 550pp. $4 (paper).

**Arkansas** (Vol. 1, part 34, Section 1. Summary data). 342pp. $2.75 (paper).

**Arkansas** (Vol. 1, part 34, Section 2. County data). 612pp. $4.50 (paper).

**California** (Vol. 1, part 48, Section 1. Summary data). 402pp. $3 (paper).

**California** (Vol. 1, part 48, Section 2. County data). 462pp. $3.50 (paper).

**Louisiana** (Vol. 1, part 35, Section 1. Summary data). 364pp. $2.75 (paper).

**Louisiana** (Vol. 1, part 35, Section 2. County data). 518pp. $3.75 (paper).

**Maryland** (Vol. 1, part 23). 544pp. $4 (paper).

**Virgin Islands** (Vol. 1, part 53). 54pp. 55¢.

#### Construction and Housing

**Housing completions: May 1972** (C22-72-5). Annual subscription $1. Single copy 10¢.

**New one-family homes sold and for sale: May 1972** (C25-72-5). Annual subscription $3. Single copy prices: monthly 10¢, and annual $1.

**Value of new construction put in place: May 1972** (C30-72-5). Annual subscription $2.50, includes monthly and annual supplement. Single copy 25¢.

**Housing authorized by building permits and public contracts: May 1972** (C40-72-5). Series C40, $8 per year; $2 more for foreign mailing; single copy (annual), $2; single copy (monthly) 55¢.

**Authorized construction Washington, D.C. area: June 1972** (C41-72-6). Annual subscription $1. Single copy 10¢.

*1970 Census of Housing*

Metropolitan Housing Characteristics
Standard Metropolitan Statistical Areas

**Amarillo, Tex.** (HC(2)-9). 48pp. 55¢.

**Galveston-Texas City, Tex.** (HC(2)-80). 68pp. 65¢.

**Mansfield, Ohio** (HC(2)-128). 48pp. 55¢.

**San Angelo, Tex.** (HC(2)-191). 48pp. 55¢.

**Waco, Tex.** (HC(2)-231). 48pp. 55¢.

*1970 Census of Population and Housing*

Census Tracts

This report presents statistics by census tract on the characteristics of the population and housing units as reported in the 1970 Census of Population and Housing.

**Chicago, Ill.** (PHC(1)-43). 312pp. and 3 maps. $7.50 per set (parts 1 and 2).

**Kansas City, Mo.-Kans.** (PHC(1)-99). 278pp. and 1 map. $1.25.

**Lawrence-Haverhill, Mass.-N.H.** (PHC (1)-109). 68pp. and 1 map. $1.

**New York, N.Y.** (PHC(1)-145). 395pp. $12.75 for Parts 1, 2, and 3.

**Philadelphia, Pa.-N.J.** (PHC(1)-159). 572pp. and 2 maps. $4.75.

#### Distribution and Services

**Monthly department store sales in selected areas: May 1972** (BD-72-5). Annual subscription $1. Single copy 10¢.

**Monthly retail trade—sales and accounts receivable: May 1972** (BR-72-5). Single copy 25¢.

**Canned food—stocks, pack, shipments: June 1, 1972** (B1-72-4). July 1972. Annual subscription, including 5 issues, $1. Single copy 25¢.

**Weekly retail sales. Estimated weekly retail sales of retail stores in the United States for week ending July 22** (CB 72-188). 2pp. 10¢.

#### Foreign Trade

**Imports SIC-based products: annual 1971** (FT 210-71). (Revised through December 1971 statistics.) 322pp. $2.25.

**Imports TSUSA commodity by country: annual 1971** (FT 246-71), (Revised through December 1971 statistics) 628pp. $5.25.

**Exports commodity groupings by world area: annual 1971.** Schedule B groupings world area and country method of transportation (FT 450-71). (revised through December 1971 statistics) $2.75.

**Exports world area commodity groupings: annual 1971** (FT 455-71). (Revised through December 1971 statistics) 674pp. $4.50.

**Exports SIC-based products: annual 1971.** Domestic merchandise world area quantity and value (FT 610-71). (revised through December 1971 statistics) 620pp. $4.25.

**Bunker fuels: May 1972** (FT 810-72-5). Annual subscription $1. Single copy 10¢.

**Airborne Exports and general imports: May 1972** (FT 986-72-5). Annual subscription (FT 900, 975, 985, and 986 combined) $3. Single copy 10¢.

**Export and import merchandise: June**

1972 (FT 900-72-6). Annual subscription (FT 900, 975, 985, and 986 combined), $3. Single copy 10¢.

**Highlights of exports and imports: June 1972** (FT 990-72-6). Annual subscription $5 ($1.25 more for foreign mailing). Single copy 45¢.

**Gold movements: June 1972** (FT 2402-72-6). Annual subscription $1. Single copy 10¢.

### Geography

**Census tract memo No. 16.** Standard Metropolitan Statistical Areas. 20pp. 50¢.

### Industry

**Spun yarn production: 1971** (Series: MA-22F.2(71)-1). Single copy 25¢.

**Rubber: supply and distribution for the United States: summary for 1971** (Series: M30A(71)-13). $1.50 per year. Single copy 15¢.

**Plastics bottles: summary for 1971** (Series: M30E(71)-13). $1.50 per year. Single copy 15¢.

**Consumer, scientific, technical, and industrial glassware: 1971** (Series: MA-32E (71)-1). Single copy 25¢.

**Closures for containers: summary for 1971** (Series: M34H(71)-13). $1.50 per year. Single copy 15¢.

**Construction machinery: 1971** (Series: MA-35D(71)-1). $1 per year. (Including MQ-35D.) Single copy 25¢.

**Pumps and compressors: 1971** (Series MA-35P(71)-1). Single copy 25¢.

**Major household appliances: 1971** (Series: MA-36F(71)-1). Single copy 25¢.

### Population

#### Population Characteristics

**Households and families, by type: March 1972** (advance data from March 1972 sample survey) (Series P-20, No. 237). 8pp. 10¢.

**Selected characteristics of persons and families of Mexican, Puerto Rican, and other Spanish origin: March 1972** (advance data from March 1972 sample survey) (Series P-20, No. 238). 12pp. 15¢.

#### Consumer Income

**Money income in 1971 of families and persons in the United States** (advance data from the March 1972 sample survey) (Series P-60, No. 83). 8pp. 10¢.

**Household money income in 1971 and selected social and economic characteristics of households** (Series: P-60, No. 84). 20pp. 20¢.

#### *1970 Census of Population*

**Fertility and family composition for the United States: 1970** (PC(S1)-21). 4pp. 10¢.

## ECONOMIC DEVELOPMENT ADMINISTRATION

**Economic development.** Vol. 9, No. 8. Annual subscription $1 (50¢ more for foreign mailing). Single copy 15¢.

## SCIENCE AND TECHNOLOGY

## NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

### Environmental Research Laboratories

**Recorded and processed seismic data from the 1971 San Fernando earthquake and aftershocks by the Nevada special projects party** (ERL 235-ESL 20). 40pp. 45¢.

### National Ocean Survey

**Tide Tables**—high and low water predictions: 1973. East Coast of North and South America including Greenland. 1972. 294pp. $2.

## NATIONAL BUREAU OF STANDARDS

**Earthquake research in NOAA 1970-1971** (ERL 236-ESL 21). 90pp. $1.

**A bottom sitting diver-operated sampler for engineering properties** (ERL 237-MMTC 3). May 1972. 24pp. 30¢.

**Exploration methods for the continental shelf: geology, geophysics, geochemistry** (ERL 238-AOML 8). 52pp. 50¢.

**Federal information processing standards index** (FIPS PUB 12-1). Supersedes FIPS PUB 12, January 1, 1971 July 1, 1972. 140pp. $1.50.

**Standard time and frequency: its generation, control, and dissemination from the National Bureau of Standards Time and Frequency Division** (Tech. Note 379-1). 26pp. 35¢.

**The effects of magnetic fields on magnetic storage media used in computers** (Tech. Note 735). 35pp. 40¢.

**Technical news bulletin.** Vol. 56, No. 7. Annual subscription $3 ($1 more for foreign mailing). Single copy 30¢.

## NATIONAL TECHNICAL INFORMATION SERVICE

*Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Make check or money order payable to National Technical Information Service. Price of each document is $3, unless otherwise specified. All reports are available in microfiche for 95¢ apiece.*

**Analyses of natural gases** (PB-210 339). Bureau of Mines. Helium Div., Amarillo, Tex., December 1971, magnetic tape, $55, 1 reel (please specify tape recording mode desired: (1) 7 track, 556 or 800 BPI, odd or even parity, or (2) 9 track, 800 BPI, odd parity). Contains routine analyses and related source data for 475 natural gas samples collected as part of a continuous survey of the free world for occurrences of helium. Tape is a supplement to PB-199 115, dated December 1970, containing analyses of all samples published prior to January 1, 1971.

**Conservation and better utilization of electric power by means of thermal energy storage and solar heating** (PB-210 359). University of Pennsylvania, Philadelphia, October 1971, paper copy $6.75, 265pp.

**Waste heat utilization** (CONF-711031). Oak Ridge National Lab, Oak Ridge, Tenn., 357pp. Proceedings of conference held October 27-29, 1971, at Gatlinburg, Tennessee.

**Engineering-economic potential for power plant waste heat utilization** (AD-743-494), Purdue University, Lafayette, Ind., 37pp.

**Indexed bibliography on environmental monitoring for radioactivity** (ORNL-NSIC-101). Oak Ridge National Lab., Oak Ridge, Tenn., paper copy $10 (microfiche $10), 325pp.

**Mercury in the environment—an annotated bibliography** (ORNL-EIS-71-8). Oak Ridge National Lab., Oak Ridge, Tenn., 256pp.

**Guide to technical and financial assistance for air pollution control** (PB-210 670). Gordian Associates, Inc., New York, N.Y., November 1971, paper copy $5.45, 147pp.

**National drug code directory** (PB-210 338). June 1972 (Supersedes PB-203 888). $55, 1 reel. Please specify tape recording mode desired: (1) 7-track, 556 or 800 BPI, odd or even parity, or (2) 9-track, 800 BPI, odd parity.

**Science and Technology for International Development: a selected list of information sources in the United States** (PB-210 104). Office of Science and Technology, Agency for International Development, Washington, D.C., 56pp.

**Public Technology—a tool for solving national problems** (PB-209 621). Federal Council for Science and Technology Committee on Intergovernmental Science Relations, Washington, D.C., paper copy $2.75, 65pp.

**A bibliography of economic and cost analysis** (AD-742 664). Department of the Army, Directorate of Cost Analysis, Washington, D.C., March 1972, paper copy $6.75, 210pp.

**Environmental Research Laboratories in the Federal Government—an inventory,** Volume I (PB-209 751). 366pp.

**Same Title,** Volume II (PB-209 752), 508pp.

**Federal individual income tax return data for each 5-digit zip code area in the United States: 1969** (PB-209 352). Statistics Div., Internal Revenue Service, Washington, D.C., magnetic tape, $110.00, 2 tapes (please specify tape recording mode desired: (1) 7-track, 556 or 800 BPI, odd or even parity, or (2) 9-track, 800 BPI, odd parity).

**Manpower development and utilization in the contract construction industry** (PB-210 347). Harvard Univ., Cambridge, Mass., May 1972, paper copy $7.75, 115pp.

**Numerical mapping of the continents for use in high-frequency skywave radio predictions** (TRER 31). 20pp. 30¢.

**Polychlorobiphenyls (PCBs) and related chlorophenyls:** Effects on health and environment. 1. Bibliography 1881-1971 (PB-209 944). Oak Ridge National Lab., Oak Ridge, Tenn., 141pp. Covers the majority of articles in all languages on PCBs available through January 1972.

Dept. of Housing and Urban Development, Washington, D.C., paper copy $4.50 59pp.

**Estimating housing assistance requirements and subsidy costs** (PB-209 963).

**Low and very low dose influences of ionizing radiations on cells and organisms, including man: a bibliography** (PB-209 804). Bureau of Radiological Health, Rockville, Md., paper copy $6, 327pp.

**Electronics technology in Japan** (AD-742 074). Office of Naval Research, Arlington, Va., 27pp.

**Regional housing planning: a technical guide** (PB-209 961). American Institute of Planners, Washington, D.C., paper copy $5.45, 128pp.

**Applications of aerospace technology in industry—a technology transfer profile; food technology** (N72-13071). Abt Associates Inc., Cambridge, Mass., 56pp.



☆ U.S. Government Printing Office: 1972—511-341/3

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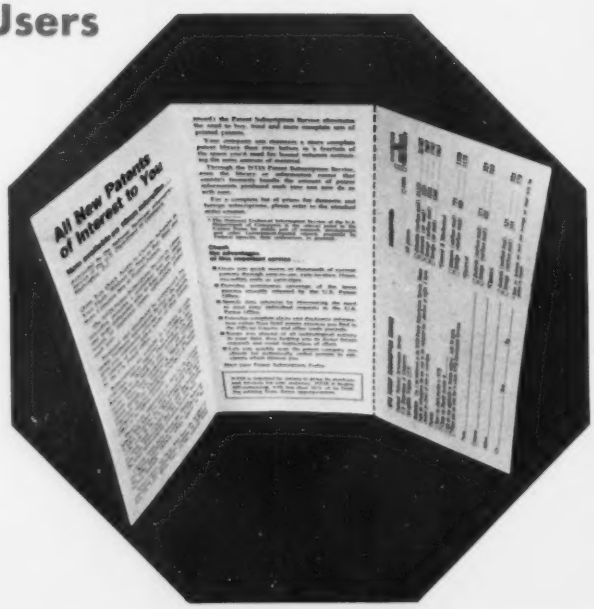


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